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# THE BUILDING OF SATELLITE TOWNS



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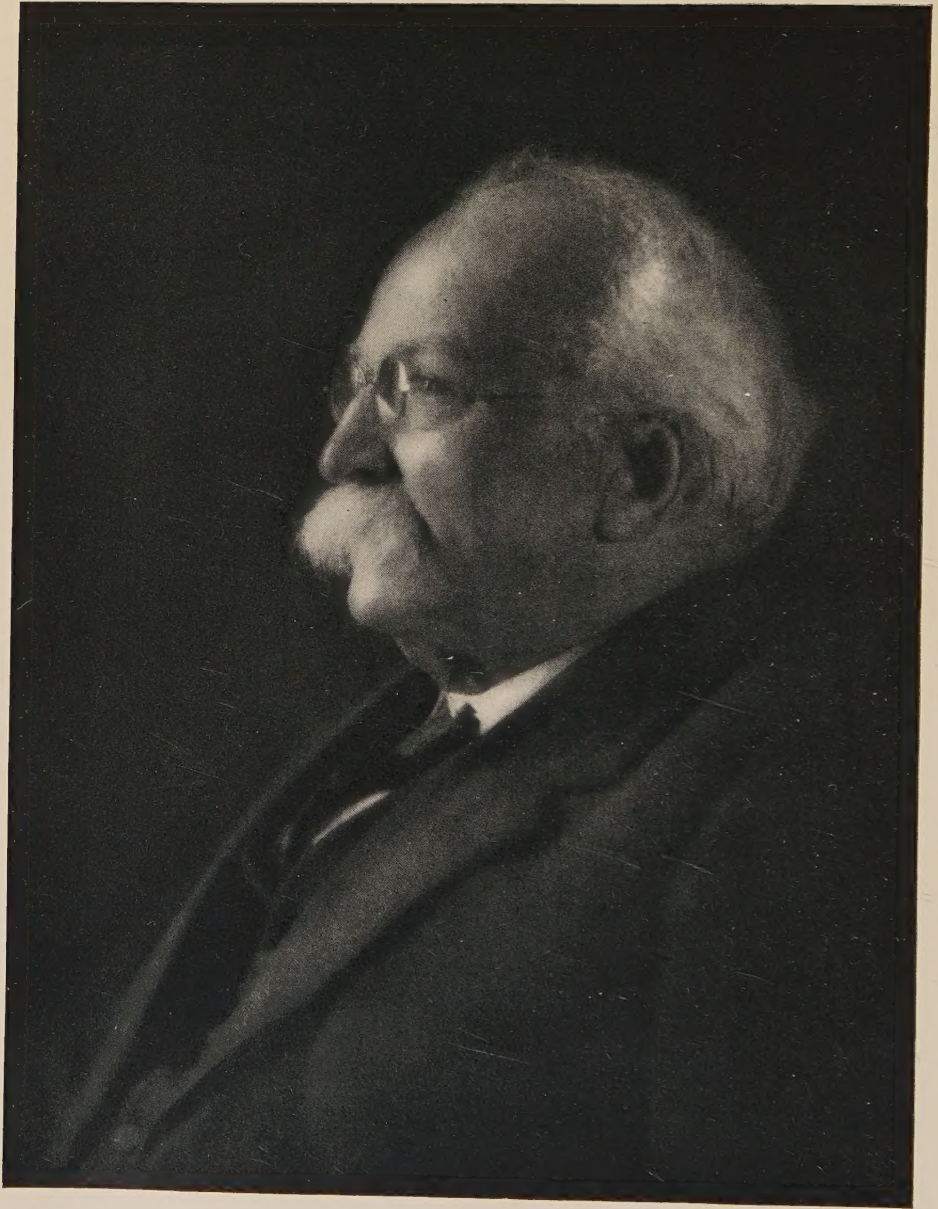
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Ebenezer Howard, the originator of the Garden City

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# THE BUILDING OF SATELLITE TOWNS

A CONTRIBUTION TO THE STUDY  
OF TOWN DEVELOPMENT AND  
REGIONAL PLANNING

BY  
C. B. PURDOM

*FULLY ILLUSTRATED*

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To  
THE BUILDERS  
OF THE  
NEW TOWNS



Any mechanical tendency to diffuse population will be furthered by the instincts and desires of the population itself. It is true that the poor now are apt to prefer the excitement of the town to the dullness of the country. But the country has been made dull by the growth of great towns, and the concentration of all life in them. If this concentration ceased, if there were more numerous and smaller towns, far from provincial stagnation, the country would lose its dullness, and huge cities would lose their attraction. Already there is a conscious effort towards diffusion, helped, even now, by the most modern improvements in transport, and already the size of our great towns is becoming a serious material disadvantage to their inhabitants. The amount of time and energy and money wasted every day in getting about London, and into it and out of it, is so enormous that if there is much further increase in that waste, it will go far to nullify even the present advantages of concentration. Those advantages are all material. Our spiritual instincts revolt against them, and their revolt grows stronger every day. Every further advance in transport will help that revolt; and perhaps some of us will live to see the decline of London brought about by a great ring of subsidiary towns each getting its first impulse of life from the metropolis, and each growing daily into greater independence and keener competition with it. Thus it may be that all the conditions of our life will be swiftly altered again, and for the better. But the improvement will be great only if we have learned the lesson of the past, and refuse to be taken by surprise yet again. Little towns can be as squalid as big ones, as any one can see in Yorkshire and Lancashire and the Black Country. A mere diffusion of London slums will not help us. We must be ready with our ideal of the small town of the future, and we must have the determination to make that ideal come true. For civilization consists not in the perfecting of any kind of machinery, but in the use of machinery, as of everything else, for the realization of ideals. Without ideals there can be no civilization, and it is owing to the lack of them that machinery has so often produced only barbarism in the past.

*The Times* (17th September 1908)

## PREFACE

THE first edition of this book was published in May 1925, and on the day of its publication the *Manchester Guardian* devoted a leading article to it in the course of which the following words occurred:

It is possible that some twenty years hence, we may date the beginning of a new grouping of our population from the appearance of this book.

On 8th May 1946 the Minister of Town and Country Planning introduced the New Towns Bill into the House of Commons, which became law on the following 1st August. The prophecy of the newspaper writer was thus fulfilled, for the object of the book, as set out in the original preface, was to discuss 'the idea of building new towns in the form of satellite towns around the large cities, as an alternative to the continuous growth of the cities over ever wider areas.'

The new legislation is intended to provide for the building of new towns and to enable industry and population to be established in them, so as to carry out the policy of decentralization, which has become national policy. In that sense, therefore, the object with which the book was written has been satisfied; but there is a demand for the book, because of the information contained in it, though it has been long out of print, and, in view of the fact that much additional experience has been gained since it was first written, a new and up-to-date edition was called for.

The need for such social studies as was attempted when this book was written was referred to in a leading article in *The Times* on 11th November 1947. The leader-writer said:

A glance at the economics and sociology of many town-planning schemes does not suggest that this need is yet generally appreciated. Vast amounts of industrial and social capital will be mis-directed if the administrative decisions which now determine the location of industry and the future form of industrial cities are not guided by adequate economic and social knowledge. The planners of tomorrow's towns have, indeed, cause for regret that there is so little to guide them in the way of studies of new communities in various circumstances during the past generation, for most of the studies which were necessary have never been made.

To supply this deficiency at least in part, and to provide guidance for the development corporations, planners, industrialists, local authorities, and others who will be concerned with the new towns, as well as to appeal to the interest of those readers everywhere who want to know about this important national development, are the objects with which this new edition has been prepared. The writer can claim at least that what he has written is the result of first-hand experience as well as of observation and thought over a long period of years.

The book is in the first place a description of the two garden cities, Letchworth and Welwyn Garden City, an account being given of the circumstances under which they

were founded, and the story of their growth being told. The principles of development observed in the two towns are explained, and the writer also endeavours to make clear what is meant by a satellite town or garden city, of which they are examples. The new towns to be built by the Government are satellite towns and garden cities, whether they be known by either of those names or not. In the last part of the book there is a discussion of the problems of new town development.

The manuscript was delivered to the publishers in the early summer of 1947, with the intention that the book should be published in the following spring, but it has been subject to the delays that are now usual in book production. Although the main text of the book has not been affected, this delay made it possible to include various references to action taken under the New Towns Act, and with the kind co-operation of the publishers this has been done up to the date of the preface.

After the book had been for some months in the printers' hands, the Minister of Town and Country Planning decided to create a development corporation under the Act to take over the completion of Welwyn Garden City. The possibility of such action had been discussed by the writer, and there has now been a sufficient interval to allow the situation that has arisen to be given some consideration, so that parts of the third section of the book have been revised and extended to cover this important change.

With the exception of quotations from official or other documents specifically noted in the text neither of the garden city companies nor the development corporations is to be held responsible for any figures or statements of fact respecting its particular scheme. When preparing the book in its original form the writer was connected with Welwyn Garden City, having been jointly responsible for the foundation of the town, and he was acting at that time as finance director. For a good many years, however, he has had no official connection with the undertaking, so that he now writes with a freedom that was not possible when preparing the first edition with, he hopes, some advantage to the interest and value of the work.

The index has been made as full as possible, and there are notes and some acknowledgments at the end of the book, the writer dispensing with footnotes in the text.

C. B. P.

WELWYN GARDEN CITY,  
*29th January 1949.*



## FOREWORD

By SIR THEODORE G. CHAMBERS, K.B.E., *Chairman of Welwyn Garden City Ltd.*

MR. PURDOM has the advantage of having taken an active part in the initial phases of the two garden cities, Letchworth and Welwyn. He therefore writes not simply as an historian or observer dealing with his subject from outside, but as one who has knowledge derived from personal experience. As a result the book has a value that no other studies of the two garden cities are ever likely to possess.

The immediate importance of the subject lies in the fact that the principles of the 'garden city' have recently been adopted as a national policy. Any one who wants to know what those principles are should read this book and examine the story of the two existing garden cities.

The publication of this new edition is very opportune, for the building of new towns now projected on a large scale raises political, sociological, technical, and, not least, financial problems that have been explored and examined and in some respects solved, though by no means entirely, in the pioneering experiments of Letchworth and Welwyn. The problems which will be encountered are examined and the author informs us how two separate groups of people dealt with them.

Furthermore, during the current year, an important phase of the garden city movement has closed dramatically; closed, I confess, in a manner that gives me much misgiving. Private enterprise can no longer play any part as an *entrepreneur*. Future garden cities, or 'new towns,' as they are to be called, will be conceived by the Ministry of Town and Country Planning and will be State managed and State controlled.

Until I became chairman of Welwyn Garden City in 1919 I had not previously come in contact with the garden city movement, but in 1917 I had read a paper at the Surveyors' Institution advocating the decentralization of population and the industrial penetration of the rural districts as a partial remedy of the evils of intensive urbanization with its concomitants of slum areas and overcrowding, and I pointed out the disadvantages to the community as a whole of the divorce between urban and rural economies. A close study of the subject of land values in connection with the land taxes of the 'People's Budget' and some twenty years' experience as a surveyor in London had convinced me that one of the most fruitful experiments for the nation would be the development of a new industrial town on a selected area of freehold land, unencumbered with vested interests or previous development, where from the start building could be done on ideal lines, architectural harmony being maintained throughout and the land values being brought into being and conserved as the fundamental economic basis of the undertaking. Of course, there was Letchworth already in being, but a new experiment

under the conditions of the post-war world and with more regard to the creation and conservation of land values than Letchworth had had seemed to me to be demanded.

When, therefore, the late Norman Savill suggested to me that I might be interested to meet Ebenezer Howard to hear about the projected garden city at Welwyn I was pleased to do so. I liked Howard, and when I afterwards met the writer of this book with Mr. Walter H. Layton (now Lord Layton) and Colonel Fremantle, M.P. (afterwards Sir Francis), I was prepared to accept their invitation to become chairman of the board to carry out the scheme. I worked with Howard from that time until his death in 1928 in complete agreement upon all matters of fundamental principle.

When Welwyn Garden City was put in hand at the close of the first world war, it was regarded by most practical men as a hopelessly wild venture. It was thought incapable of achievement to build a new industrial town of 40,000 or 50,000 population in an isolated area without any pre-existing development. The first five years of the company's history was, indeed, a period of great anxiety; but for the moral support of Sir Charles Longmore, then clerk to the Herts County Council, and the encouragement of Reginald McKenna, then chairman of the Midland Bank, I do not believe we could have seen our way through the almost insuperable difficulties we encountered.

Those difficulties were partly inherent in the nature of the undertaking, which was a highly complex operation not unlike that of a colonizing expedition, and partly due to the scepticism, almost amounting to hostility, on the part of interests whose co-operation was essential. However, in those five years the foundations were laid, and, as was afterwards proved, securely laid.

To no one does the undertaking owe more than to Mr. Purdom himself, who, during those early days, rendered the highest service, thoroughly comprehending and tenaciously maintaining fundamental principles.

Among our early difficulties was a small but significant one, the name of the town. There were people who did not like the term 'garden city,' and thought it too fanciful and detrimental to the undertaking. But the words were deliberately incorporated into the name with the object of advertising to the whole world what a garden city ought to be. As a matter of history, the name 'Welwyn Garden City' was adopted by a resolution at a public meeting held at the old village of Welwyn in the year 1919 attended by the inhabitants of the village under the chairmanship of an old Welwyn resident. I think the vote in favour of the name was unanimous. The use and retention of the name has in fact been an invaluable help in making known to the whole civilized world the meaning and the content of the term 'garden city.'

The spirit of Welwyn Garden City, which it has retained through all the years of its existence, was engendered by the pioneers who lived in the town in the days of hand lamps and muddy lanes and a railway station of railway sleepers. The hard conditions bred a vigorous determination to make the best of life, and indeed they were happy days, with many of the elements of life in a colony dependent on itself and with its future in its own hands.

The unfortunate decision to take the completion of the town out of the hands of the Welwyn Garden City Company ignores its history and achievements and is difficult to understand except on the narrowest ideological grounds. In my opinion it is without any justification. The complex organization, built up during the experience of a quarter of a century, which was capable of completing the town within a few years according to the original scheme, and upon which the Government's own policy is admittedly based, is to be disintegrated and scrapped in favour of bureaucratic control under Treasury supervision. The Minister of Town and Country Planning would listen to no argument. No impartial tribunal existed to whom an appeal could be made. There was apparently no legal power to interfere with his arbitrary decision. The company is to be replaced by a State corporation that will start without any corporate experience and will be directed by a department in Whitehall.

I fear not only for the future of Welwyn Garden City but for the whole conception of new town building. The building of a town is something much more than is involved in what is called 'town-planning.' It is a business demanding enterprise and practical gifts of a high order; it cannot be carried out as a merely administrative activity. Compared with what we have succeeded in doing at Welwyn Garden City, the results are likely to be lifeless, extravagant, and ineffective. However, I must not pursue that matter, but conclude by commending this book as the story of two great enterprises, which deserves the attention of all lovers of their country, and of all who love the idea of cities as centres of domesticity no less than of industry, science, and art.

THEODORE G. CHAMBERS

WELWYN GARDEN CITY,  
*5th July 1948.*



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*The Letchworth photographs are by Clutterbuck and others.  
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The plan of le Corbusier's 'Verdant City' is reproduced from *Concerning Town-Planning* by permission of the Architectural Press. Thomas Sharp's application of the satellite town idea is reproduced from *Town Planning* by permission of Pelican Books. The diagrams of Stevenage new town, Crawley-Three Bridges new town, Harlow new town, and Hemel Hempstead new town are reproduced by permission of the respective architects and development corporations.

PART I  
INTRODUCTORY



## CHAPTER I

### THE GROWTH, OVERGROWTH, AND REGENERATION OF CITIES

We have to substitute for the worship of capitals and the State a revived city and regional life, rejoicing in variety, unashamed of provincialism, co-operating in friendly rivalry towards a rich growth of national life . . . the true city, which reconciles all the elements of a rich and genuinely human existence.

PATRICK GEDDES

#### § 1

IN this book the subject considered is not the form of city concentration but its decentralization, and the subject is regarded from the particular aspect of the satellite town. This introductory chapter, however, is occupied with a brief reference to city growth and overgrowth though the writer attempts nothing in the nature of a study of it, for the examination and analysis of the state of cities has been well done in recent years. Nothing has surpassed le Corbusier's brilliant attack upon the great cities unable to adjust themselves to the needs of man. 'Here,' he says, 'lies the Yea or Nay, life or slow extinction.' More recently the subject was considered in the remarkable American book, *Can our Cities Survive?* by José Luis Sert (Harvard University Press, 1942), the outcome of studies made by groups of architects in eight European countries and the United States of America, associated in the Congrès Internationaux d'Architecture Moderne. The answer they give is that on the evidence provided by the cities of the world those cities cannot survive unless they are made to serve their functional ends by a new architecture, in which is recognized that our cities are 'not streets and buildings merely, not aggregations of people merely, but equally the heart and content of society.' In other words, the real problem of the city is not technical but human. This, of course, takes us into realms where action is most difficult, and explains why there have been so few tangible signs of city reconstruction. If plans owe validity to the understanding will of the people, not simply of experts, not even of leaders, but of the people themselves, then planning is a very serious affair indeed.

It is, indeed, as a fundamental question of politics that town-planning has now to be regarded. We can no longer leave the subject to architects and engineers, we must bring the citizen into it so that he may share responsibility. In the check to city development caused by the war and continued into the years of confusion that have followed, we have the opportunity to see where we stand and to agree upon a conscious principle of action. Some of our cities have been partially destroyed and have to be rebuilt, and those that have been untouched are none the less in need of rebuilding. There are many new plans, of which the most notable is the *Abercrombie-Forshaw County of London Plan* (1943), a work that is striking for the questions that it raises or causes to be raised. What is the city? What are the principles to be observed in its



building? How is the chaos of the city to be subjected to order? These and other questions are raised not only about London but about all cities. There are no more serious or more pressing questions before people to-day. It is true that we have to face urgent problems of world politics and economic stability, but it is becoming clear that the conflicts and disorder of the world are but the projection on a larger scale of the failure to plan, to organize, and to bring about harmony in the life of cities. Before everything else, our immediate problem is the state of our cities and how to make them into fit instruments of human society.

## § 2

There is nothing more crucial for our civilization, because cities are the special products of civilized man. Civilization owes its very name to the city. The word 'city' is Roman, of course, deriving from *civitas*, what belongs to *civis*, a citizen, the city being the citizens. The origin of the idea of a city is Greek, the city in Greece being the state, the body of freemen, 'city' and 'state' having the same meaning. The English word is *burgh* or *borough*, but *cité* was used in England in the thirteenth century for important boroughs. Shall we now say 'city' or 'town'? *The Oxford English Dictionary* reminds us that in its English sense the word 'city' has no legal definition, and is used vaguely of towns. There is no justification for confining the use of the word 'city' to the place of an episcopal seat, as is commonly done. In this book the word is used in the vague sense to include 'town.' It is a fact that never in England has a city as such had larger rights than a town. A city is, indeed, an important town, no more. Municipal status is dependent upon a charter, as with a county borough, or a borough, or upon private legislation. At present, local government, and the status of towns and cities are in transition, as is our entire social life.

## § 3

As a sociological phenomenon, the city represents the interactions of human beings and associations of human beings; it is also an organism, having parts and a life of its own, being, as an organism, at the same time a natural product and the creation of will and intelligence.

It is irrational to consider the physical form of cities without first considering their sociology, which explains why the feverish activity in town-planning has so little result. Yet the sociology or social science of cities, which is the science of the city as a whole, can hardly be said to exist.

Important contributions have been made in this country to the sociology of cities, notably by Patrick Geddes, a biologist whose influence all subsequent writers acknowledge, by W. R. Lethaby, an artist and humanist, by Raymond Unwin, a sociological architect, and by Patrick Abercrombie, an architectural historian, and their contributions, though by no means of equal significance, are none of them to be ignored.

There is also the contribution of Ebenezer Howard with which this book specially deals. To no part of this, however, except recently to the planning work of Abercrombie, has much attention been given. In France, the great contributions of Pierre Joseph Proudhon and Auguste Comte, belonging to an earlier time, still await application to the modern city, which these philosophers did not see but only prophesied about. Throughout Europe, in every country, and also in America, the specific study of cities has been mainly the work not of historians, or economists, but of architects, who have seen the city through the eyes of artists. To discuss their work with any thoroughness does not come within the scope of this book, though further reference will be made to it, and at this place mention should be made of what Henry Wright and his architectural associates attempted in America, and the writings of Lewis Mumford, who also is not an architect but a humanist-philosopher.

## § 4

In the amorphous condition of our society in its state of transition, the city expresses more concretely than does anything else the lack of guidance, the accumulation of ignorance, and the lethargy to which man is subject. No one who looks at our cities fails to condemn them for their inefficiency, their poverty of cultural equipment, their lack of form, and their bewildered governments. Yet in cities are contained not merely the record but the technological means and the spiritual guidance, such as it is, of what we call civilization. There is no civilization without cities; and unless we can bring our cities to order, get them to satisfy our needs, make them comfortable homes, organize them as centres of wealth, build them as works of art, our society will wholly disintegrate, and our civilization fail. Professor Arnold Toynbee has noted twenty-one civilizations that have vanished; but it is the societies, a much greater number, that have disappeared and the cities in which they were contained. Why this happened is worth considering.

## § 5

We are justified in thinking that the sites of all cities were chosen by men with some purpose in mind, and that their original building was governed by that purpose. The site of London, where these words are being written, was not fixed upon by chance, but as the best site for a settlement upon the River, the wisdom of which choice time has proved. But it is none the less certain that the growth of cities, of which London is the outstanding example, has been without purpose in any sense that can be accepted. Citizens have no doubt looked after themselves and their own purposes, and have extended the city to suit themselves, but the effect upon the city, in other words the social purpose of the growth of the city, has been ignored. There has been no concentration of attention upon the city as a whole, and the city has not, therefore, possessed a controlling element. For instance, cities must needs grow, for growth is a law of life, and

the best cities tend to overgrow through the energy of their populations and the satisfactions people get from their environment. But this natural overgrowth, to which all things in nature are subject, ought to have aroused action to restore balance and redirect energy; but that has not happened. Overgrowth, however, may not only be natural, it may be due to chance or political causes beyond the power of the city itself. All overgrowth, however, means overcrowding, which is loss of space, one of the vital needs of cities. The lesson that has to be learned is that natural growth, and all the other forms of growth however productive in themselves, have to be made subject to will and intelligence, or the city must be harmed. That is a certain lesson of history. Yet everywhere cities have overgrown and become grievously overcrowded, stifled, and disordered, phenomena recognized throughout the world, with results everywhere lamented, but nowhere until to-day, when nothing can at the moment be done, considered capable of being altered.

It is true that for more than a hundred years the character of cities has been changing, for the old cities were nothing like our great conurbations. How often have we been reminded that London itself was once a city whose people could ramble afoot into the country! They can do so no longer, and no boy of fourteen living in Golden Square can write as one such boy did:

How sweet I roam'd from field to field,  
And tasted all the summer's pride. . . .

Now the city is packed dense with people who jostle each other in the streets for mile upon mile, who march like creatures possessed through its subways, who let themselves be jammed like dead fish in trains and buses, who work with distaste and sleep uneasily one upon another in great buildings of steel and concrete.

In their enormous multiplicity, these immense populations had no existence prior to the industrial revolution. Until the rise of mechanical industry the towns were inhabited by ecclesiastics, soldiers, lawyers, merchants, craftsmen, tradesmen, and their servants, with nobles in the larger towns, and a residuum of the indigent poor. Some agricultural workers also lived in the towns, as they do still in many small towns. The erection of factories and dwellings for workers brought the industrial towns into existence as we know them, the poet lamenting as they were built that they

. . . disclaiming all regard  
For mercy and the common rights of man,  
Build factories with blood.

A word we have just used reminds us that no city ever existed for the poor, nor has any city ever adapted itself to them. Until the seventeenth century the poor were hardly to be found anywhere, for not until the enclosures, the increase of the power of money, and the mechanization of industry were there poor in any number, and only in the course of the last century with the growth of the great cities and the conurbations did the housing of the poor become a serious and wellnigh overwhelming problem. What we call the housing problem is, or rather has been, the problem of finding a place



for the poor in the city. The problem of housing, however, has now changed and is no longer what it was even recently. The problem directly concerns every one. The second war proved the truth of what the German Oswald Spengler devoted a great book to showing (*The Decline of the West*, 1918), that cities contain the fatality of peoples. For years before the war there had been a steadily increasing flight from the city, a fact recognized in the censuses of Britain and America; and no wonder! We now know from dreadful experience and from awful warnings of what may come that it is dangerous to live in cities. Yet to leave the city is to give up civilization, and we have no alternative but to deal with its problems and to make the city an instrument of order.

## §6

Why does the city fail to satisfy us and why has it fallen into disrepute? Why does it grow and overgrow to become the monstrosity that it is? Is not the answer that it has continued to be the product of natural life, and of human unconsciousness, that mind and intelligence have not been brought sufficiently into its service? The city is a means of human degradation not simply because men are evil, as they are, but because they continue to act unconsciously, not as civilized beings. No man is a civilized being unless he acts responsibly, which means that he becomes aware, pays attention to other people, and acts with consciousness of society and of humanity as a whole. It is the city as a natural growth that is the monstrosity. What we praise in cities, their picturesqueness and the mellowing hand of time, ought to put us on our guard. They are the signs of the absence of art, they are the witnesses of civic ill health and decay. Yes, we must admit it: to the extent that cities are the products of nature they have the evils that we lament. As natural works they interfere with intelligence, and must pass away, for everything in nature prepares for decay and the end. The societies of the past have disappeared because they possessed too fully the qualities of natural products, and like everything that nature brings into existence and fosters they had to die. The task of men in civilization is to bridge the distance between the city as a product of nature and the city as a work of art. Nature has its own achievement and beauty, which are not the same as are possessed by the works of man, guided by the spirit, lighted by intelligence, and inspired by love.

## §7

The elements of art in cities are (a) a plan or design that is kept under revision, (b) attention to functions, and (c) organic relation to the countryside of which the city forms part. That cities should have a plan is now admitted, and plan-making has become a much exercised activity. A city's plan is not, however, what an architect in the exercise of his technical capacity produces on a drawing board (though the architect and his drawing board are needed), but a design in the hands of working planners, who create

as they plan, and are the agents of the civic consciousness of the city, in which the city exists as a whole, a design regarded as the projection of prophecy and political imagination. A plan is essentially and prosaically a means of providing space for the different functions of the city, balancing one consideration with another; adequate space is its first object, for without space nothing can live. That is the technology of the city, and the nature of the plan is to be a living and changing thing subject to design that proceeds from vision, and enters into reality through discussion, understanding, and agreement.

The old town plans so far as we know them were imposed by princes, but only for small populations and a few acres. There has never been a plan for a city, until now, nor any means of making one, or any pioneers to carry it out. Thus we must realize that the art of town-planning is in its infancy; but, as with all our social arts to-day, it has to be perfected without delay, for we live at a time when quickness of action is called for, which means that plans have to be thought out, that intelligence has to be applied to them, and the means for their execution made ready, all done with a sense of urgency.

### § 8

The functions of the city are expressed in the plan and contained in its parts, the primary functions being seven—that the city should be a dwelling place, a working place, a focus of communication, a centre of the arts and sciences, a seat of government, a means of social intercourse, and a temple of religion. In the expression and demand of these functions the object of the city as the environment of a society is fulfilled. Because a society is an organic thing, with life and movement, the plan of the city must have flexibility, so that it may extend and renew its dwellings, reconstruct its working places, complete its communications, and avoid rigidity and congestion in every part.

### § 9

In the organizing principle of the city, that is to say in the consciousness with which it is designed and built, relation to the countryside has to be recognized, for the works of man are placed in nature, and men depend upon the products of the earth. That relation is nothing less than attention to the size of the city. Until recently, this question, often raised, was never answered, for it was regarded as of no sociological, economic, or even political interest. Now, however, in the era of the atomic bomb, the size of cities has become a matter of political urgency, and what ought never to have been forgotten, that politics is fundamentally the control of numbers, is being recalled.

What is the best size for a city? Throughout the nineteenth century and up to near the middle of the twentieth the question was never asked. Not so in the ancient cities, which were limited in size because they had to be defended against attack, so that their plans were for a specific number of people and were mainly based upon the means of defence, with account taken of food supplies. History shows that the failure to control



numbers caused many ancient cities and entire societies to disappear. Plato discussed the question in the *Laws*, where he said that 'every legislator ought to know so much arithmetic as to be able to tell what number is most likely to be useful to all cities.' To-day, the same knowledge of arithmetic is needed, but it is not available, and the subject is still little discussed. At a sitting of the Royal Commission on Local Government in 1923 the following exchanges took place:

*Sir George Macdonogh.* . . . You told us this morning that you had an inferior limit of population suitable for a county borough, namely, 50,000. May I ask if you have any superior limit? Would you think a county borough of a million was too big, or that two millions was too big?

*Sir Robert Fox.* . . . I have not thought of a limit, except that the other day I was thinking of what could be possible, and the conclusion I arrived at is, anything up to a million. I think the gradual increase of a town till its population comes to a million would leave it quite a convenient unit of administration.

Over that you think it would be too large? I am inclined to think so. (Questions 7544 and 7545).

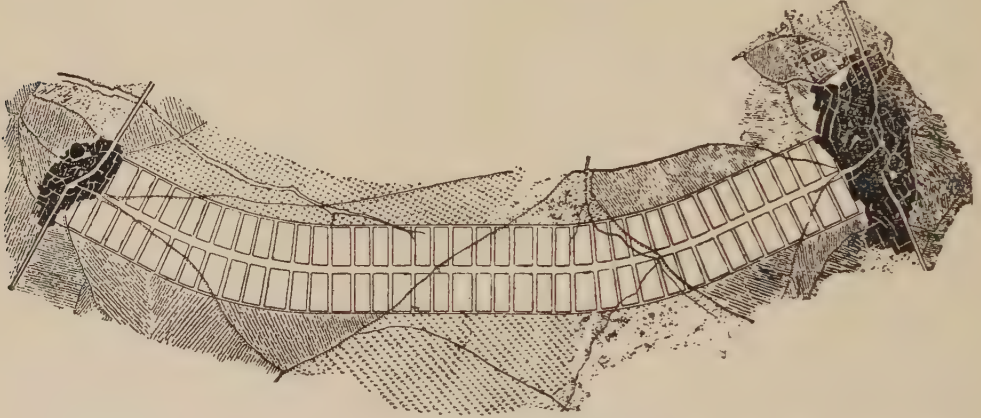
What emerges from the above words is that there is no doubt a limit of size beyond which a town should not grow, but what that limit is no one can tell; the arithmetic is not known, which is a pertinent criticism of the governors of cities, to say nothing of legislators. We know that our cities are too large, and probably that many of our small towns are too small; but we do not know the best size. The test of our civilization will be whether we can find the answer to the question of size, that is to say, whether we are able to control numbers.

Without pursuing the subject in its larger aspects we may say that a town must certainly be large enough to be a real town, perhaps not less than 30,000 people. On the other hand, it should not be so large as to prevent it from remaining a single unit; a population of 100,000 being a possible maximum. Research is greatly needed on the subject; there is none at present, only opinions that do not go beyond what was said in the first edition of this book.

It has now been accepted, however, that the regeneration of cities is to be found in dealing with their size. London, it has been agreed, is not to become larger. With possibly less precision, the same decision has been taken with regard to the other large cities. Their growth is to be provided for in the form of new or satellite towns, which is the specific subject of this book. Sometimes, indeed, as with the London County Council, there is reluctance to abandon the habits formed during past periods of unconscious behaviour, which leads the authority even to-day to embark upon what it describes as 'quasi-satellites,' which is unfortunately only a deceptive label for housing schemes. This of course arises from the pressure of circumstances, for the need to meet the immediate needs of people without houses is grievous; but, none the less, such action is highly blameworthy, and no excuse should be accepted for it. There is an alternative to the growth of London and to the building on the agricultural land and spaces of Greater London, and to ignore it is worse than folly at this stage.

## § 10

From time to time attention has been devoted to the means of giving a new direction to the growth of cities, but until recently not with any seriousness. The city's fatalistic influence caused its control to be regarded as beyond human powers. There was, for instance, Ebenezer Howard's proposal to build garden cities, to the consideration of which this book is devoted. That proposal has now received official recognition; and has been adopted as national policy, as we shall discuss. Earlier, there was the curious



A SPANISH IDEA OF A 'LINEAL CITY,' SHOWING ITS RELATION TO TWO EXISTING CITIES (1882)

proposal for a lineal city, projected by Don Arturo Soria y Mata in 1882, and carried out in the environs of Madrid by the *Compañía Madrileña de Urbanización*. As the name implies, it was the idea of building towns in straight lines. The project was for a 'city' of 30,000 people, the fundamental principles of the scheme being described as follows:

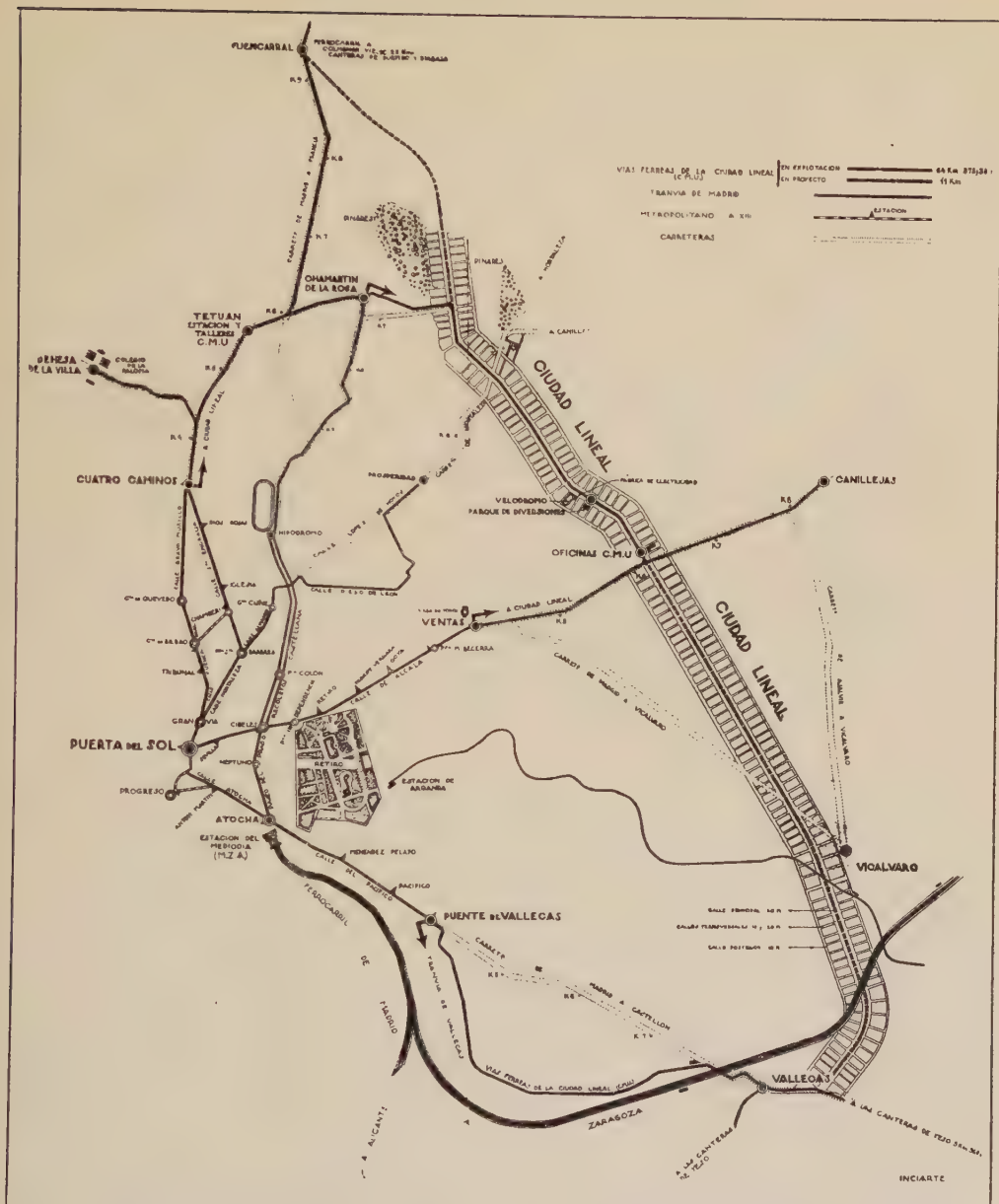
- (a) The means of locomotion determine the design of the city.
- (b) The plan of a city should precede its construction.

(c) The form of a city should be that of its main road or street axis, or what we might call the 'spine' of the urban system, making it as wide as possible (say 40 metres, or 44 yards, as a minimum), in the central part of which two or more railway lines, preferably electric, should be constructed. Furthermore, as the regular geometrical forms (squares, rectangles, and trapeziums) are the most perfect and have less perimeter than other irregular ones of the same area, it follows that the detached portions or blocks of houses of the city—which are the vertebrae of this vertebrate system—should be determined by drawing rectangular lines to the railway track in the main street, or road, with a separation of at least 20 metres (nearly 22 yards) from the transverse streets, whereby the mains for water, gas, and electricity supplies, as well as for sewage and other sanitary arrangements, can be laid in straight portions or lengths crossing each other at right angles, in a much cheaper, easier, and perfect manner than in the existing 'invertebrate cities.'

(d) One-fifth of the city should be allowed for houses and four-fifths for cultivated land, the minimum area for each house being 400 square metres.

(e) One house for each family, and an orchard and flower garden for each house.

(f) Equitable distribution of the land.



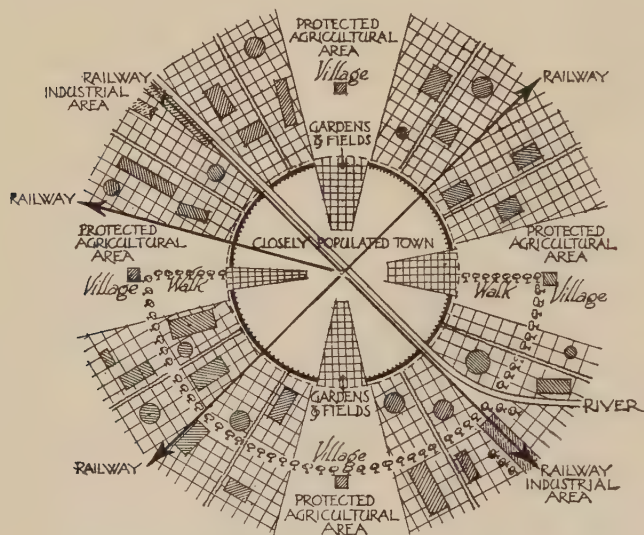
PART OF A LINEAL CITY AT MADRID (1922), PARTLY CARRIED OUT  
The city of Madrid is on the left and the chief railway station, Mediodia, is indicated.



The object was to connect existing cities with each other 'by means of lineal cities, thus forming in course of time in each country a vast triangular system, in which the area of each urban triangle formed by the apexes of the old cities and the sides of the new ones will be devoted to farming or industrial exploitations.'

It was claimed for the lineal city that it eliminated traffic congestion by reducing road junctions and crossings, that it was economical for industry and agriculture by facilitating free movement of goods, that it encouraged compactness, and that it brought town and country together.

The promoters specifically claimed that the lineal city was a superior form of city to that of the garden city; but the present writer thinks that the scheme is hardly to be regarded as city building at all, but is rather a system of suburban extension. The lineal cities were to join up the existing cities, not to serve as city units. An obvious disadvantage was that by spreading buildings out in long lines the sense of compactness and physical unity, the contiguity of people, which is of the very nature of cities, was lost.



A GERMAN ARCHITECT'S DIAGRAM FOR AN IDEAL CITY

Introducing gardens and fields into the city, placing industry on the outskirts, and permanent agricultural areas, the whole so designed that it could be extended indefinitely. This appears to be the basis of many recent planning projects. The design was by Adolf Rading (1924).

Further, it seems doubtful if any real economy, even from a transportation point of view, was to be effected by establishing populations continuously along railway or tram routes, because both railways and trams take up their passengers at definite stopping places, and require the largest possible population around each stopping place. There is no benefit from being on a railway or tramway except at such stopping places. Furthermore, trams have become superseded by motor buses, and the development of air transport, which seems to require a certain degree of concentration, seems to be against it. Yet the project was extremely interesting, particularly in its encouragement of agriculture, and in the attempt to construct cities on some kind of philosophical principle, and it had the merit of having reached some degree of actual accomplishment.

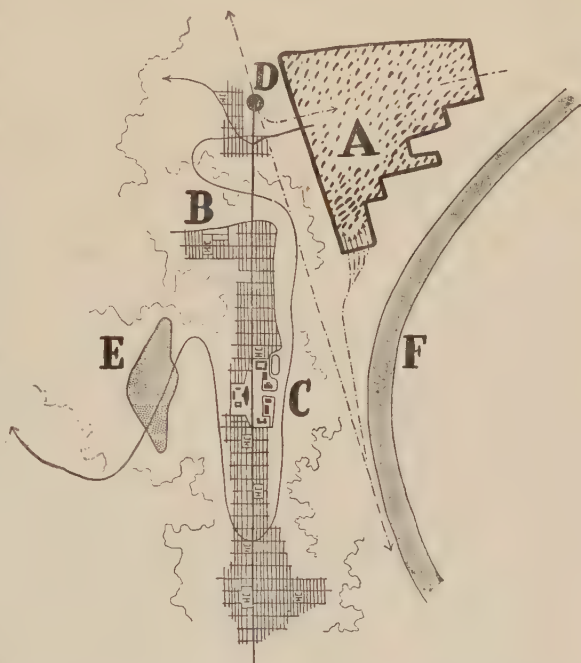
The Soviet Government was attracted to the lineal city idea, and formulated a proposal for ribbon towns (see the *Architectural Review*, May 1932). In England a lineal city movement existed for a time, and put forward as late as 1935 the proposal

that London should be redeveloped as a lineal city, the advantages claimed being that 'No new towns will be needed—"no desecration" no "green belt" no "town-country" regional plans, and no partisan theft of roads.' The idea was, indeed, adopted by the modernistic architectural group known as MARS as the basis of the first published plans for the rebuilding of London (see the *Architectural Review*, June 1942). This ambitious and clever scheme had as its main feature that it allowed for the practically endless extension of London on a 'herring-bone' system, which, from the point of view considered here, was not a merit, for it lacked all conception of the city as a whole. On this system there was no reason why London should cease to extend, except for the limitations of geography, which was, therefore, only another attempt to be natural.

## § 11

Without mentioning various other proposals, some of which were carried out, such as the 'green-belt' towns of America, for not many of them had substantial value, except the interesting Radburn project in New Jersey, reference must be made to the ideas of

Tony Garnier, which, because no doubt ideas on the subject are so few, have lately been revived. Garnier was a French architect who as a young man exhibited in Paris in 1901 a lay-out for a *cit  industrielle*, which was carried further in 1904, and to which a book was afterwards devoted, * tude pour la construction des villes* (Paris, 1917). The project was for a population of 35,000 people, providing for residence, work, leisure, and transport. There was to be an axial road in the city running east and west, with sub-roads at right angles, the intention being that buildings should have east and west aspects. The railway was to enter the city through a subway, so as not to interfere with the plan. The industrial area was separated from the residential area by a green belt. Garnier had an original lay-out, and the scheme was partially carried out at Lyons in 1924. There can be little doubt that Garnier, who was an artist of ability, was



A DIAGRAM OF TONY GARNIER'S 'INDUSTRIAL CITY' (1910).

A main north-south highway runs through the long grid-iron residential area, with a civic centre (C) in the middle; (D) is the main railway station; (A) the industrial area; (E) sites for sanatoria and rest homes; (F) the river. School sites are shown in the residential area, and sites for technical and other schools (B). The railway is a dotted line. The city is divided up by a parks, open spaces, and rural land.



influenced by Howard's book, but his scheme was really one of suburban development; he was concerned with the way in which a town could extend, and to regard his ideas as having larger significance is not justified.

## § 12

Of all the positive proposals for the regeneration of cities the most arresting are those of the Swiss architect who calls himself le Corbusier (Charles Édouard Jeanneret), whose name has already appeared in these pages. His great merit is that he does not merely analyse the condition of cities but endeavours to grapple with their reconstruction. Le Corbusier sees, as do others, that the great cities have reached a crisis, and that unless they can be adapted to the demands of modern life they will perish. Their problems are, he perceived, to overcome the congestion at their centres and to control their expansion, and he declared that to deal with those problems it was necessary to increase conscious control over the cities to the extent of reconstructing the city's skeleton, so that the city may be entirely reorganized. His book on cities is called *The City of To-morrow (Urbanisme)*, published in English in 1929, but a later smaller book has since appeared entitled *Concerning Town-planning*, published in 1947, the English version of *Propos d'Urbanisme* (Paris, 1946). I propose to give some attention to these two books, so far as they bear upon our present subject, because le Corbusier has genius and every one has been influenced by him, and, indeed, he is the one writer on cities who even appears to have anything original to say.

In *The City of To-morrow*, le Corbusier sets out to construct 'a theoretically watertight formula to arrive at the fundamental principles of modern town-planning,' and proceeds to outline proposals for a city of three million inhabitants. He takes a level site with 'a river that flows far away from the city,' and on that site he lays out the city. Its population consists of citizens proper, who live and work in the centre; suburban dwellers, who live in the 'garden cities,' work in the outer industrial zone, and do not come into the city; and those of a mixed kind who work in the city but live in 'garden cities.' Thus he arrives at his formula, which may be set out in his own words:

Our first requirement is an organ that is compact, rapid, lively, and concentrated: this is the city with its well-organized centre.

Our second requirement will be another organ, supple, extensive, and elastic; this is the garden city on the periphery.

Lying between these two organs, we must require the legal establishment of that absolute necessity, a protective zone which allows of extension, a reserved zone of woods and fields, a fresh air reserve.

. . . we must increase the densities of the centres of our cities, where business affairs are carried on.

We must increase the open spaces and diminish the distances to be covered. Therefore the centre of the city must be constructed vertically.

The modern street should be a masterpiece of engineering and no longer a job for navvies. . . . Traffic can be classified more easily than other things. Three kinds of roads are needed, and in superimposed storeys. (a) Below ground level there would be the street for heavy traffic. . . .

- (b) At the ground-floor level of the buildings there would be the . . . ordinary streets. . . .  
 (c) Running north and south and east and west, and forming the two great axes of the city, there would be great arterial roads for fast one-way traffic built on immense reinforced concrete bridges. . . . The number of existing streets should be diminished by two-thirds. . . .

My city is conceived on the gridiron system with streets every 400 yards, though occasionally these distances are subdivided to give streets every 200 yards.

. . . plots of about 400 yards square will give us sections of about 40 acres in area, and the density of population will vary from 50,000 down to 6,000, according as the lots are developed for business or for residential purposes.

The formula and its application become, as it will be observed, not a little confused. Le Corbusier can hardly be said to be scientific in his terminology; but, without pausing to discuss what he says, we will go on with the exposition. In the city area, the skyscrapers—‘The skyscraper is a noble instrument’—have 1,200 inhabitants to the acre, but 95 per cent of the ground is open, and there are residential blocks for two classes of people, one with 120 inhabitants to the acre, but 85 per cent of the total area kept open, and the other with the same number of inhabitants but only 48 per cent of the total area kept open. The industrial area is to have buildings sixty storeys high. There is a category of educational and civic centres, universities, museums of art and industry, public services, and a county hall, but nothing is said about them. In the centre of the city is the railway station with three upper levels: (a) landing stage for aeroplanes, (b) crossing for fast motor traffic, and (c) ground-level access; and three underground levels: (d) tube railways for the city (each skyscraper being a tube station), (e) the local and suburban lines, and (f) the main lines.

A section of the book is headed ‘Garden cities, their aesthetics, economy, perfection, and modern outlook,’ but little is said on this great theme, except that:

We must build in the open. The lay-out must be of a purely geometrical kind, with all its many and delicate implications.

The subject of geometrical buildings is considered at some length, after which there is a description of how the ‘suburbanites’ who live in what he calls ‘garden cities’ (he does not define what he means) are to be housed. His proposal is the construction of ‘cellular’ dwellings, each dwelling occupying 50 square yards, built on two storeys, contained in ‘immense blocks in three superimposed double storeys.’ Each dwelling is allocated 50 square yards of garden, 150 square yards for sports, and 150 square yards for kitchen garden. Each block of 660 dwellings could be a community, ‘an immense workshop for household economy,’ with a co-operative organization to direct the catering and domestic service, employing professional cleaners, etc.

The scheme for the great city of three millions is more or less complete, but the details are few, because, he says:

It bores me more than I can say to describe, like some minor prophet, this future City of the Blest.

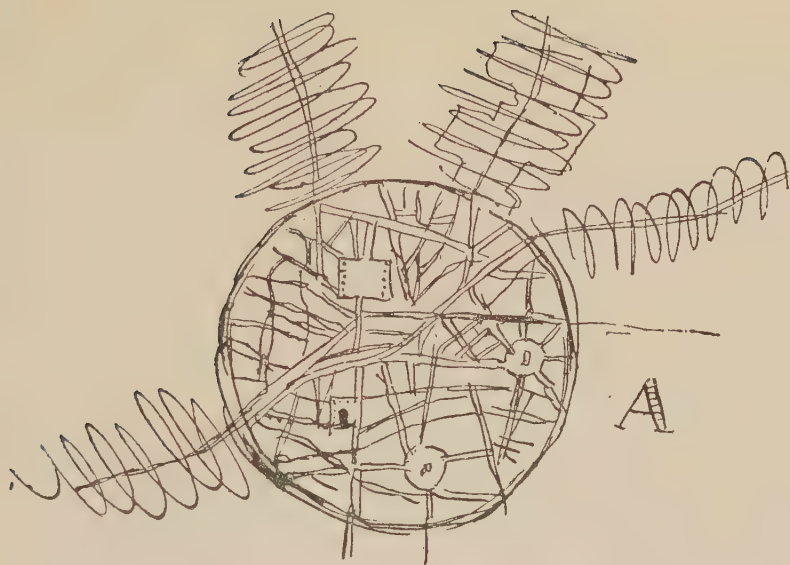
Thus we get from the impatient le Corbusier a conception of a city for the machine age, with industrialization carried to the extreme; a city designed for centralization and

financial control. We are bound to note, however, that le Corbusier accepts the idea of the great city, what he does is to attempt to reduce it to order. He does not challenge or examine the idea. This is surely a fundamental weakness in his thinking, for the idea of the great city has to be justified. In the second place le Corbusier accepts the natural form of the city, the closely built-up centre, and suburbs on the outskirts. He gives order to the form, but does not question it. Thirdly, and not to carry the discussion too far, he does not show that he understands what a 'garden city' is. His 'garden city' is *la cité jardin* in French, which is no more than a housing estate. There is no French equivalent for the term 'garden city.' The French have never understood the garden city for that reason; and the translation of Howard's book into French and the existence of propaganda to make known the idea coincided with the garden suburb movement in England, so that the French have never been given an opportunity to understand what Howard really meant.

It is difficult to believe that le Corbusier did not know the difference between a garden city and a *cité jardin*, and in the last book, *Concerning Town-planning*, he does attempt to provide a French equivalent for the term, calling it 'Verdant City,' which is a town of ten or twenty thousand inhabitants, which he describes. His plan for these small towns is reproduced: it contains, it will be noticed, a 'horizontal garden city,' and specialized zones for defined functions; but later on he prints a diatribe upon the 'garden city' and the 'family house,' declaring that 'The existence of a family house stands to-day upon foundations which in a large measure no longer exist.' He means that the conditions of a settled existence, which enable families to be established and homes to function, are no longer possible, which if it were true, would mean that cities were no longer possible. This, in fact, is the logic of the centralized city, and of the totalitarian form of life of which it is the expression: it is nothing less than the death of mankind. Le Corbusier fulminates against the horizontal garden city, and glorifies the idea of the vertical garden city, but by both terms, however, he means a housing estate, not a garden city at all.

The significance of this second work is in le Corbusier's development of his plan of the great city and adoption of the idea of the lineal or linear city. He designs a national framework with the cities spread out along road, rail, water, and air routes. 'The basic brick of the linear city,' he says, 'is the industrial establishment itself,' the units being 3,500 workers in 'green factories,' with 'garden cities' of both horizontal and vertical types, each unit surrounded by an agricultural belt. This, however, is to abandon entirely the idea of the city as a reciprocal society with a life of its own, and to substitute for it mechanical perfection. It is impossible to accept such ideas as creative. Le Corbusier, striving after originality at all costs, is not original, but he must not cease to be audacious. He displays the egocentricity of Picasso, the artist he most resembles. His influence is powerful and widespread, but disintegrating. No architect to-day seems able to get away from it; to mention but one example, Abercrombie's County of London Plan is full of le Corbusier. As an architect his buildings are efficient, exciting, and





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A is le Corbusier's schematic expression of our present cities, a confused and inextricable texture of roads. Life flows sluggishly within their veins filled with uproar and stink. The suburbs spread out, polluting the countryside. This is contrasted with

B, his 'Verdant City,' born of modern planning. (1) Railway; (2) by-pass road; (3) road serving local industries; (4) road serving residences; (5) residential units; (6) the horizontal 'garden city'; (7) workshops with other industries to the right; (8) religious centre; (9) departmental stores; (10) civic centre with shops, cafés, cinema, and theatre; (11) air-port for autogyros.

express feeling; but he has no constructive sense of the city as such, for his rationalized city of abstract architectural forms threatens sterility as utter as that of the great city he condemns. Yet it is impossible not to warm to a man who writes:

A city! It is the grip of man upon nature. It is a human operation directed against nature, a human organism both for protection and for work. It is a creation.

Those words might have been adopted by the present writer as a motto for this work, for they convey the idea he has in mind; but the standpoint from which these pages are written is that the city has a spiritual end, the culture of the soul. The city is devoted, therefore, not merely to the efficiency of living but to human life itself, and as a conscious creation it must have space, privacy, and not too many people at a time.

Le Corbusier does not appear to have considered the question of number, and his postulates of three millions for the city and 3,500 for the industrial units are mere guesswork. Why not six millions or half a million for the city? This absence of any answer to the fundamental question of number is a fatal weakness, for the proper size of any human work is of first importance. The decaying city is either too large or too small, and to know what should be the size of the city is necessary for its regeneration and perfection. Le Corbusier substitutes for the monstrous city a more terrible monstrosity of steel and concrete, which is hardly to be regarded as regeneration. This question of number will be considered again in these pages.

### § 13

To regenerate the city, let us say in concluding this introductory chapter, is to lift the city out of the sphere of natural growth and of phantasy into that of conscious control. It is to give it a new form, nothing less than a new structure, and, as le Corbusier so strenuously declares, a new fitness for its functional ends. The reconstructed city has to be reduced in size, and the new city, together with the surrounding towns, including those new towns that are rightly called its satellites, create the region, which, as a federation of self-governing communities, ought to be regarded as the unit of government in the society of the future. That is a brief description of what we have in mind. In the reconstruction plans and the schemes for new towns now being considered, a start is made towards this genuine regeneration, but, so far, no more than what seems to be a hesitating start. Much more thought, greater energy, and practical effort have to be put into the work than has yet been devoted to it. This is the crucial question of our age, upon the answer to which depends the fate of the nation, and not only of this nation but of mankind. Cities have to be given the means to provide the environment for a new social life, new conditions for the home, and a new setting for industry. The desire is there, as well as the disposition to experiment, and the readiness to adopt new methods; but in Britain when what has been discussed and agreed upon reaches the plane of action, the restraining hand of Treasury control is introduced to reduce effort to the



minimum and check novelty and enterprise. That hand must be lifted, because it is exercised with the wrong aims, and is not guided by vision, without which the people will perish.

We need a basic plan of city growth, which prevents overgrowth and overcrowding, and provides for change. This is not a matter of redesigning the centres of cities and building one new town here and another there where sites can be found, but the working out of a design for city and region in which the parts are related. In the reconstructed cities and in the new towns, the neighbourhood units for living, the working areas, the trading districts, and the amplitude of buildings for social uses on the scale demanded by a self-respecting people ought to be conceived of as a unity. A step would be taken towards this were, for instance, the County of London Plan, the Greater London Plan, and the new plans for the City of London to be put together to make a single plan. At present, of course, nothing of the kind is being attempted, and we are at the stage of having forced upon us haphazard schemes that do not deserve to be called by the name of design and that lack the first elements of art, as though the capacity for controlling our public affairs was absent. We cannot be satisfied with the present situation and should not allow it to continue.

The city as we know it represents the lack of relatedness between people and associations. It does not provide an environment for living relations between people. Town plans are regarded too narrowly from the point of view of convenience or comfort; but these considerations are not the necessary conditions of our lives, and something far closer to the truth of human existence has to be recognized.

Town-planners as such know far too little of the life of cities. They are abstractors. To them the city is a drawing, something set down in black and white, or in colours, on paper hatched and cross-hatched, and hung up on walls. The city is nothing of the kind. It is not even the officials who sit in town halls, who administer the laws and tell the city councillors what to do, though they are nearer to it than the town-planners. Not because they are planners are they ignorant of the city, but because, first, their methods are incomplete and, secondly, they do not undertake the Herculean mental labour of comprehending what the city is. They are satisfied with too little. Therefore, though they know so much, they are not able to answer those who curse them and want their plans scrapped. Yet the answer is simple: planning is an attempt by men to make something of their lives; it is the idea of causing things to happen according to design instead of by chance. Without planning man does not exist as man, for planning implies thought, reflection, purpose, and choice, which are the names of man's particular capacities. The town-planner has to enter into the lives of the people who live in the city's streets, walk about its streets, attend its churches, theatres, and sports grounds, stand behind its shop counters, bargain in its markets, labour in its factories, lie sick in its hospitals, and sit beside the dead. His task is not merely to classify this life, as is done in a social survey, but to enter into it; that is why he can never work alone but must collaborate, and why a town-plan with a man's name upon it has no meaning. A

town-plan is a living, changing thing, as the city itself is living and changing: it is never final, or complete, and, when it appears to be finished, it has to be started all over again.

A city is very hard to define, although it is so real. Beyond the area it is to occupy and the number of people it should provide for, no definition is possible. The city cannot be pinned down or in any final sense put into any plans. It is intangible, though one stands on its solid pavements and is jostled by its crowds. Not in that fine town hall, nor in any particular thing, is the city. The planner must be conscious of his limitations. Only those who live in the city know it, and among them only those few who are aware, and what it is of which they are aware they cannot say. To plan the city is to attempt to bring about order and harmony in human relations. Perhaps in that definition we get as near as is possible to the heart of the subject.

#### § 14

So we come to the conclusion that the justification of city reconstruction and the new towns is that they will provide an environment for the meeting of people so that they may resolve their conflicts and agree. The plans must provide suitable conditions for homes and work, but they must do more. Nothing less than an aim at social agreement will suit the needs of the age. Civilization consists of the acknowledgment by men of each other in civility, and their unity with each other in common tasks; but civility has been broken and half recognized, and we have as yet but little experience of unity, though the taste of it, and the possibilities that lie within it, were discovered during the last years of the war. Our cities do not yet, however, provide the means for participation in civic life in any real sense, and that deficiency they must now make good.

At the moment of writing, the signs of social failure are everywhere present, and there is evidence that society in its existing form is not maintaining the common good. Always, of course, in natural societies, a great mass of men have been poor, wretched, exploited, and without sense of responsibility; but the generality of citizens have had enough to maintain the feeling of security, and have considered themselves to be responsible for their city. There is now discomfort, lack of food, physical cold, and want of spirit among those who have not previously experienced them, and the mass of men are entering into responsibility, without, however, either enlightened guidance or the effective means to enable them to exercise that responsibility. In this fact lies great dangers, which we must bestir ourselves to overcome. Because the special function of cities, to make productive the interaction of individual lives in everyday affairs, is not being fulfilled, there exists a grave menace to the life of society. No society in the past had a secure basis, and no cities however great and beautiful have endured, neither Babylon, whose very site has vanished, nor Athens or Rome, whose glorious but barren ruins ought to be a warning to us. These cities passed away because the societies of which they were the physical form fell apart. Everywhere the state of cities is evidence of the total values in the life of man, and when those values diminish, the cities, too, are lost.

## § 15

That city building, rebuilding, and regeneration are not mere technical matters is, as has already been made plain, part of the constant theme of this book. Architecture as the leading technical means is to be looked for throughout the city, but architecture is not merely building, it is building with a purpose that passes beyond utility. That is why architects and engineers must work together in the building of the city, and with them all other technical men, surveyors, industrialists, and economists, together with sociologists, educators, sculptors, and painters, and all whose work it is to make the city productive. Utility serves a limited purpose, and there must be added to it the excess that exists always in a healthy organism; the products of that excess are art, which is eternal delight, and brotherhood, which makes life worth living. A high civilization is possible only in cities in which there is fellowship. In them, not elsewhere, are to be found the liberty, equality, and fraternity of the republic. To this end our cities, new and old, need to be dedicated, and in that conviction we come to consider our specific subject of new towns.

The maps and plans are largely based upon the Ordnance Survey with the sanction of the Controller of H.M. Stationery Office.



## CHAPTER II

### WHAT IS A SATELLITE TOWN?

As regards the disentangling of existing areas, this must be a difficult and slow process; but as regards their extension the problem is comparatively easy. . . . We must avert the pernicious system of growth by mere inflation or accretion around the fringe. We must secure the reservation of open space, and the planning of definitely organized and largely self-contained units to provide for the expansion of industry and population. We must prepare regional plans to locate these units, and design them to provide as far as possible all that is necessary to localize the life within them. Each unit must itself include all the necessary parts, and for each part space must be allowed for expansion.—RAYMOND UNWIN

#### § 1

FOR the sake of completeness it is necessary to refer to the fact that the term 'satellite town,' or its equivalent, seems to have been first used by G. R. Taylor in a series of articles printed in America, and afterwards reissued as a book under the title of *Satellite Cities* (New York, 1915). In that book the author described a number of industrial suburbs built in the neighbourhood of Chicago, St. Louis, and other cities in America. He showed the tendency of American industrialists to escape from the congestion of the cities into the surrounding country, and he described what was done to establish satellite communities there in the form of manufacturers' towns, built for the employees of particular industries. Taylor did not deduce any general principles of town or regional planning from the results of his studies, which were mainly factual, though he emphasized the advantages to their inhabitants and to industry of these well-designed communities (as they sometimes were, though not always), and used them in support of his argument for 'community planning.'

#### § 2

Use of the term in this country owed nothing to that American book or to the ideas contained in it but arose out of the attempt to revive the garden city movement in connection with housing after the end of the first war in 1918. What was meant by a satellite town in that connection went far beyond anything considered in America at that time, for it was an attempt to get new towns built, in place of building suburbs or industrial villages. With that object the term 'garden city' was presented in the form of a town-building project, dependent in some respects upon a city but with a distinct and separate entity as a town, that is to say, not a suburb or part of a parent city.

The term 'garden city' was already well known, but its currency had become debased in 1919. The intention was to re-mint it, and there was no idea of substituting 'satellite town' for 'garden city.' As will be discussed later, 'garden city' had then become

almost synonymous with 'garden suburb,' and although it was acknowledged that the latter term had a different meaning from the term 'garden city,' so far as it had any meaning at all, the difference was almost always ignored. The claim that a housing estate or a building development was 'laid out on garden city lines' was considered sufficient to justify its description as a garden city. It seemed evident that the term garden city was regarded as possessing distinct commercial value, but its misapplication was causing its specific meaning to be lost. Thus by the descriptive new term 'satellite town,' it was hoped to give fresh currency to 'garden city' and to the creative idea for which it stood.

### § 3

Of course, the idea that towns should be regarded as satellites of great cities was nothing new, for there were plenty of familiar examples of towns that were satellites of other towns. The emphasis, however, was upon the idea of the 'town' rather than upon the fact of its being a 'satellite,' and the object was to indicate that it was not a suburb. Experience showed that not everybody liked the new term, and efforts were made to differentiate between it and the term 'garden city,' but nothing came of them, for there was no denying that almost any new town in this country would be within the sphere of an existing town or city, and thus a satellite. The proposal to establish satellite towns has never been anything but a proposal to establish garden cities. The terms 'garden city' and 'satellite town,' therefore, may be considered to have become interchangeable and they are so employed in this book.

When he introduced his New Towns Bill in the House of Commons on 8th May 1946, the Minister of Town and Country Planning (Mr. L. Silkin) said:

The House will observe that it is not called a 'Satellite Towns Bill,' or a 'Garden Cities Bill,' and for reasons which I will give later I hope we may regard the terms 'satellite' or 'garden city' as applied to a town, henceforth, as having been interred decently.

In fact, the minister did not give any reasons for this statement, nor did he refer to the matter again. He will find that the terms have not been interred, or, indeed, that they need to be; for they describe what he proposes to do. The new towns sponsored by the Government, which will be discussed later, are to be garden cities and satellite towns; if they prove to be neither they will not carry out the minister's declared object.

At various times dislike has been expressed for the term 'garden city,' because it is said that gardens are not specially characteristic of such places, and the places are not cities. But, of course, gardens are characteristic of Letchworth and Welwyn Garden City, as they must necessarily be of towns planned in the way in which they are planned, and the use of the word 'city' can hardly be objected to with any reason, for the word has no precise technical meaning. 'Garden city' is, perhaps, rather fanciful; but after fifty years of usage it can be accepted. Certainly, no satisfactory alternative to it has been found, though searched for, and even 'satellite town' does not replace it, for that is



merely a descriptive term, though, for the reasons I have given, it is used in the title of this book. An American equivalent, 'green-belt cities,' is no less fanciful than the original term, and has no exact definition, being used indiscriminately; it has no currency in this country, though a recent writer on garden cities has used it for the title of his book. 'Garden city' ought, in fact, to be recognized as a technical term for a particular kind of town, the definition of which we shall come to presently, a definition that has been acknowledged for many years, and to refrain from its use is unnecessary and unjustified. It seems as though by rejecting it, recognition were grudged to that modest and simple man, Ebenezer Howard, to whom, however, acknowledgment must be given in any reference to new towns, as, indeed, the minister gave it in the speech to which I have referred.

#### §4

There have been other objections to the terms we are discussing, but with due respect to the writers who have made the objections, they have been the outcome of confusion of thought. For instance, Miss Kate K. Liepman in *The Journey to Work* (1944) complains about the confusion between 'garden city' and 'satellite town,' but as she includes Wythenshawe and Speke as garden cities, it is clear that she has not troubled to understand what a garden city is. Most of the objections, however, are due to criticisms of Letchworth and Welwyn Garden City, of their planning or architecture, or of the slowness of their growth; attention will be paid to those criticisms later on. Even these objections, as we shall see, are the result of comparing the two towns in their incomplete state with preconceived ideas of what they should be, and possess no linguistic significance.

By a satellite town is meant a town in the full sense of the word, a distinct civic unit with its own local government and corporate life, possessing the economic, social, and cultural characteristics of a town, and, while still maintaining its identity, in some sort of relation of dependence upon a large town or city. The term does not mean a village, because a village has not the functions of a town, neither does it mean a suburb or any form of community that is absorbed or in process of absorption into another community, and lacks its own local government, even though it may have a distinct name. The word 'satellite' is used in the sense of a body under the influence of a more powerful body but possessing its own identity.

That the satellite town should be in some relation of dependence upon a city is implied in its name. No attempt need be made to define too closely what that relation should be. The 'satellite' might conceivably be within the city boundary, provided that sufficient land were preserved between the city and the new community to prevent physical absorption, or even contact. A city that had within its own area a wide belt of rural land could very properly, if conditions were suitable, establish a satellite in that area. But unless there were a physical distinction between the city and its satellite—in

other words, a belt of rural land between them permanently maintained—it would be but a misuse of terms to call the community a satellite town; for it could be nothing but a suburb. Furthermore, to prevent it from being a suburb it would need its own local government.

The distance at which the satellite town should be from its parent depends upon circumstances. The decentralization of the city must be effective and not nominal; there must be a redistribution of industry and social and civic activities, so that the daily concentration of population upon the city centre is reduced. There must also be brought about a real contact with agriculture on the part of the population as a whole. For that reason satellite towns should not on the average be nearer to one another or to the parent city than five or six miles. It is hardly possible to make a more precise statement than that.

The satellite town should have its own social, commercial, industrial, and residential centres. It should have a certain degree of completeness in itself. What the town in fact contains will depend upon the site. Though the town ought to be a local government entity and not part of the local government of a parent city, the association of satellite towns with each other and with the parent city is, however, another matter; for the federation of towns and cities in regions is a development of government that is to be desired.

## § 5

As satellite towns in the sense in which we are considering them are garden cities, it is necessary to consider what a garden city is. We owe the conception of a garden city to the late Sir Ebenezer Howard, who stated it in a book entitled *To-morrow*, published in London in 1898, and reissued in 1902 under the title of *Garden Cities of To-morrow*, the version in which the book is best known. It is not too much to say that this small volume, though not recorded in the reference books as a book of the year of its publication, is one of the most important books of the twentieth century, for while first published at the close of the last century, it certainly belongs to the present one.

## § 6

As we shall see, the constituent parts of the garden city idea are not new. Indeed there are few ideas in the realm of thought that can be regarded as original, and there can hardly be any proposals of a political or sociological character that have not a pre-natal history. Though it will be interesting to trace some of the component elements in Howard's garden city conception, we should bear in mind as we do so that nothing can detract from the originality of his proposals as a whole in relation to the problems upon which they were intended to have a bearing. Howard wrote in the full flood of a period of enormous expansion in national production, particularly mechanical power and iron

and steel, but at a time, too, when there was less idea of the organization of society and less thought upon the existence of organic structure in society than ever before. It was a time when belief in progress as a natural process was in full vigour though shaken by the obvious social distresses of recurring spells of serious unemployment, the depopulation of the countryside, and the crowding of people into the cities. I propose to say more about these matters when I come to discuss Howard's proposals, but I want, before doing so, to give a brief account of the man.

## § 7

Ebenezer Howard was born on 29th January 1850, at 62 Fore Street in the city of London, the son of a baker and confectioner; he was a true Londoner by birth and habit of mind. According to his own story, he was sent away to boarding school, first to Cheshunt, afterwards to Ipswich, and started work in a City stockbroker's office at the age of fifteen. Howard then passed from one office job to another, in the course of which he learnt shorthand. Visiting the Poultry Chapel, of which the afterwards famous Joseph Parker of the City Temple was minister, young Howard took down one of his sermons and sent it to the preacher with the offer to do the same every Sunday. The outcome was that Parker engaged him as a private secretary, and, maybe, the preacher's later practice of printing his sermons weekly was influenced by Howard's enterprise. However, the engagement was not a success, for Howard stayed only three months, in the course of which Parker told him that he should have been a preacher, advice that was not far off the mark.

Howard went back to office work, but, being advised that he should have an outdoor occupation as his lungs were weak, he went with two companions to America and took up 160 acres of land in Howard County, Nebraska. Nothing is known of this episode in his career, which did not last long, for he was nothing of a countryman and was very soon in Chicago working in the office of an official shorthand writer. There he stayed for some time, but his subsequent movements are obscure, though we know that he was interested in inventions; he said that a woman evangelist told him to give up inventing, but he ignored the advice and had his mind upon mechanical inventions of various kinds all his life.

He came back to England in 1876, and continued his occupation of shorthand writer, working in the Law Courts and elsewhere, with brief intervals, for the rest of his life. He seems to have been highly expert at this work and his services were much in demand, though when he tried to set up in business on his own account he failed, so that he had to go on working as an employee. There is plenty of evidence that Howard had a typical inventor's mind. He made some improvements in the Remington typewriter, of which he was very proud, and spent many years and much money of his friends in an endeavour to perfect a shorthand typewriting machine. His attitude to the garden city, and indeed to life in general, was that of an inventor, for he was inquiring and experimental,



and more concerned in thinking out problems that interested him than in the application of the results.

His visit to America, where Howard saw, of course, much real estate development, and where he certainly also must have seen the Garden City on Long Island, established by Alexander T. Stewart in 1869, had no doubt a profound effect upon him. The boldness of Stewart's scheme for converting 8,000 acres of barren land into a model town with gardens must have impressed him, though he would never speak about it. Stewart's town had not got very far at the date of Howard's visit, for although Stewart had plenty of money and embarked on the scheme with energy, constructing a railway to the estate from New York and making wide, tree-lined roads, he died after six years, which caused the scheme to be held up, but it was later developed into a thriving suburb of New York City.

In 1879 Howard married, and about the same time joined a debating club called the Zetetical Society, where he met his lifelong friend James Leaky, also Bernard Shaw and Sidney Webb. Shaw became greatly interested in Howard's subsequent ideas, but Webb did not. At the Zetetical Society the discussion of religion was not excluded, which pleased Howard, and it was at the meetings of this club that Bernard Shaw discovered that he was a speaker. Possibly it also made a speaker of Howard. His marriage, too, must have helped him, for his wife was a woman of marked ability, level-headed, practical, intelligent, who took an active interest in his ideas and was a capable speaker. They had four children, a boy and three girls.

London had a visit from Henry George in 1881. This must have been a turning-point in Howard's life, for he read *Progress and Poverty*, heard the author lecture, and became interested in land nationalization. Another early influence was Thomas Davidson, whose Fellowship of New Life, founded in October 1883, suited Howard's enthusiastic but puritanical and moralistic nature. The decisive influence upon the impressionable young man was, however, Edward Bellamy's *Looking Backward*, which was published in London in 1889, having first appeared in America the year before; the novel ran through edition after edition, and a popular edition was available at sixpence. It was this book, which so greatly thrilled thousands of readers with its picture of the possibilities of unlimited social progress, that gave Howard the idea of a town built as a whole on scientific principles. Ideal communities were in the air. Thomas Davidson had a project for a co-operative, educational, industrial, and residential settlement in the neighbourhood of London, and there were other schemes for ideal communities, as there always are in a time of spiritual ferment, for society as it is never offers scope for aspiring minds. Howard attached himself to none of these projects, but worked out his own scheme, adopting as its economic basis the land values created by the community, the secret of which he had learned from Henry George. He drafted his scheme and circulated it in manuscript, interesting a gradually increasing number of people. His energy was untiring; but he had no money, no prominent friends, and his work kept him busy for long hours.

## § 8

In the end, however, Howard got his book published. *To-morrow: a Peaceful Path to Real Reform* was its title, obviously inspired by Bellamy. The book was widely reviewed in the press, its diagrams of the proposed city being reproduced in many papers. The subject was clearly of popular interest, and eight months after the book appeared, on 10th June 1899 the Garden City Association was formed, with T. W. H. Idris, the mineral water manufacturer, as the first chairman of its council.

The objects of the new association were to promote the discussion of Howard's project and ultimately to formulate a practical scheme for a garden city. With a subscription of one shilling a year, the association's income for the first two years, with the collections taken at meetings, amounted to no more than £241 13s. 9d. This meant that its efforts were on a small scale, though enthusiasm was unbounded. Then Howard discovered that a leading Chancery lawyer, Ralph Neville, K.C., who was also a Liberal politician and a land nationalizer, was interested in his scheme, so he succeeded in getting Neville to become chairman, and soon after a full-time secretary was engaged in the person of a young Liberal political agent named Thomas Adams. These two men put the association on its feet, and brought the scheme into the sphere of practical politics. Neville had a strong personality with much driving force, and he was at the same time a charming and intelligent man; his large practice at the Chancery Bar had given him an established position. Adams was an ambitious Scot, hardworking, resourceful, and with a sound sense of the value of propaganda and how to organize it. A conference on the advantages of industrial decentralization was held in September 1901 at the Cadbury village of Bourneville, attended by a large number of people, which aroused much public interest, and a second conference on the same subject was organized at W. H. Lever's Port Sunlight in the following July. At these two industrial villages decentralization was shown in operation, and there was ample evidence of its practicability. These conferences were really brilliant achievements and caused the proposals of the association to be taken seriously.

A year later, in July 1902, the Garden City Pioneer Company Limited was registered to investigate sites and to take the preliminary steps for the establishment of the first garden city. This was progress; Howard's garden city was in process of being lifted out of the sphere of Utopian ideas and given a workable shape. Many people were persuaded the thing could be done, and large numbers of important people in all walks of life lent their names to the support of the project. Indeed, the readiness to bless it was remarkable. 'Why should the creation of a town be an insuperable difficulty?' it was asked, and the answer that was given was 'It is nothing of the kind.'

Materials for a tentative realization of Mr. Howard's ideal city exist in abundance in London at the present moment. Time and again it is announced that some London firm have transferred their factory to Rugby or Dunstable or High Wycombe for business reasons. It ought not to be impossible to systematize this movement and give the old country some new towns in which intelligent design shall direct the social workings of economic forces.



That was what the *Journal of Gas Lighting* said, and similar arguments were put forward by many people. Howard was not over-optimistic when he said: 'Ere long, I trust we shall meet in Garden City,' for within a little more than another year he had met many of his supporters upon an actual site.

## §9

Let us now examine Howard's scheme for a garden city as he put it forward. The original edition of *To-morrow: a Peaceful Path to Real Reform* was published in 1898 by Swan Sonnenschein & Co. Ltd., in red cloth at 2s. 6d.. It contained 176 pages and 7 diagrams in colour. In 1902 a second edition was issued by the same publishers in green paper covers, with a design by Walter Crane, at one shilling. This second edition differed slightly from the first. A short chapter entitled 'Administration—A Bird's Eye View' was omitted, together with four of the diagrams, also an appendix on water supply. Howard was frequently subjected to much criticism on the details of his scheme, and these omissions were the result. He was prepared to abandon whatever was not essential: what he left out did not affect the main project, and the rest of the book was reprinted as originally written. Howard had the wisdom never to dispute with any one upon any aspect of his scheme upon which there was disagreement, but sought to concentrate upon the points of agreement.

The book was written in a simple, modest way, with touches of Ruskinian eloquence, and it gained from having nothing of the cocksureness of propaganda. Howard was presenting a case with moderation, and it was difficult not to agree with him. He took his text from the well-known verse by James Russell Lowell, which begins:

New occasions teach new duties;  
Time makes ancient good uncouth . . .

which he placed upon his title-page, and he quoted from a number of other authors; but his best quotation was from John Ruskin's *Sesame and Lilies*, in which his project was admirably forecast:

Thorough sanitary and remedial action in the houses that we have; and then the building of more, strongly, beautifully, and in groups of limited extent, kept in proportion to their streams and walled round, so that there may be no festering and wretched suburb anywhere, but clean and busy street within and the open country without, with a belt of beautiful garden and orchard round the walls, so that from any part of the city perfectly fresh air and grass and sight of far horizon might be reachable in a few minutes' walk.

These words became, in fact, the motto of the garden city movement, repeated everywhere the scheme was spoken about.

In the introduction to the book, Howard stated that there was one matter upon which all people of every party and opinion were fully and entirely agreed, which was to deplore that people should continue to stream into the overcrowded cities. He quoted politicians, trade union leaders, scientists, and newspaper writers in support of the statement. How to restore the people to the land was the master key, he declared, to opening the

door through the means of which a flood of light would be thrown upon the social problems of the day. The master key was to be found in the marriage of town and country, and to the two metaphors he added a third, the town-country magnet, which was the garden city.

There are in reality not only, as is so constantly assumed, two alternatives—town life and country life—but a third alternative, in which all the advantages of the most energetic and active town life, with all the beauty and delight of the country, may be secured in perfect combination. . . .



DIAGRAM OF THE THREE MAGNETS ('To-morrow,' 1898)

He made a diagram of the magnets, which has since often been reproduced. It correctly set out what he had in mind, a town-country magnet in the description of which Ruskin's eloquence was translated into practical terms. Howard said:

I will undertake, then, to show how in 'Town-Country' equal, nay better, opportunities of social intercourse may be enjoyed than are enjoyed in any crowded city, while yet the beauties of nature may encompass and enfold each dweller therein; how higher wages are compatible with reduced rents or rates; how abundant opportunities for employment and bright prospects and advancement may be secured for all; how capital may be attracted and wealth created; how the most admirable sanitary conditions may be ensured; how beautiful homes and gardens may be seen on every hand; how the bounds of freedom may be widened, and yet all the best results of concert and co-operation gathered in by a happy people.

From this and from the subsequent discussion of the subject in the book, it will be seen that Howard's idea was not a mere housing scheme, as those who have not studied what he wrote have supposed, and even many of those who have purported to study it have asserted. Housing was no more than a detail in his scheme, and is not discussed by Howard at any length. Howard was only indirectly a housing reformer. He was concerned with the essential problem of urbanism, the overcrowded city and the unplanned town, the disorganization and poverty of community life, and he aimed at a fundamental change in prevailing methods of allowing cities to grow. He aimed, too, at the reconstruction of London and other cities, and he believed that those aims could be realized by solving the simple problem of building a single small city as a model.

He proposed, therefore, that an estate of 6,000 acres of agricultural land should be bought in the open market at a cost of £40 an acre, or £240,000, which was the average price of agricultural land in 1898. The purchase price was to be raised on mortgage debentures bearing interest at a rate not exceeding 4 per cent. The estate was to be held by four trustees, first as security for the debenture holders, and secondly 'in trust for the people of Garden City.' This was the first time (on page 21 of his book) he had used the name, and he did so without explanation. He defined immediately the foundation principle of the scheme:

. . . all ground rents, which are to be based upon the annual value of the land, shall be paid to the trustees, who, after providing for interest and sinking fund, will hand the balance to the Central Council of the new municipality, to be employed by such council in the creation and maintenance of all necessary public works—roads, schools, parks, etc.

He was quite definite as to what he had in mind:

. . . a healthy, natural, and economic combination of town and country life, and this on land owned by the municipality.

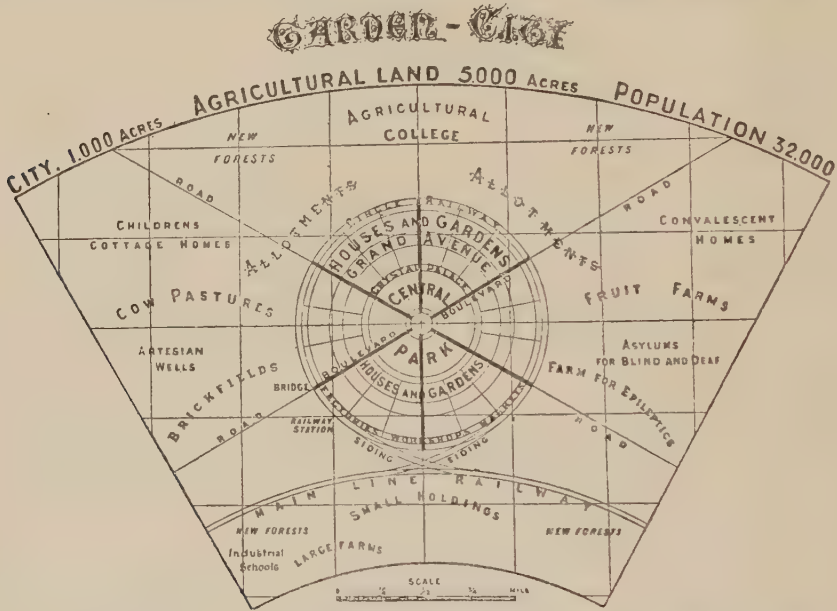
Howard used 'municipality' in the sense of the people in their corporate capacity who lived upon the estate and formed the town.

## § 10

The town was to be built in the centre of the estate and to cover 1,000 acres, with a population of 30,000. He described it as circular in form, 1,240 yards, or nearly three-quarters of a mile, from centre to circumference. The plan showed six boulevards, 120 feet wide, which divided the town into six equal wards. In the centre was a small circular garden of  $5\frac{1}{2}$  acres. At the ends of the boulevards and fronting upon the little garden were the larger public buildings, town hall, theatre, museum, library, hospital, and concert hall. Around these buildings was the Central Park of 15 acres, which was enclosed by a Crystal Palace, intended to contain a permanent exhibition of manufactured goods, the shopping centre, and a winter garden. The town was further divided by the circular avenues, the third or central avenue being called Grand Avenue, 420 feet wide, in which there was a continuous park of 115 acres, with sites for schools and churches.



The houses fronted on to the various avenues and the boulevards. There were about 5,500 building lots for dwellings, of an average size of 20 feet by 130 feet, the minimum being 20 feet by 100 feet. This gave a maximum of 20-28 houses per acre, excluding roads, or an average of 16-7 houses per acre. The widths of the avenues and other roads were not given. On the outer ring of the town was a circular railway, and the First Avenue was occupied by factories and workshops, warehouses, markets, coal yards, etc.



EBENEZER HOWARD'S DIAGRAM OF THE GARDEN CITY ('TO-MORROW,' 1898)

The main railway was connected with the town's circular railway. Thus the town was walled around by factories and workshops and encircled by the railway, so that it was impossible to leave or enter it except by going under or over the railway. Outside the town was the agricultural belt, which occupied 5,000 acres. In the agricultural belt were allotments, small holdings, and farms, and sites for an agricultural college, hospitals, etc.

The marriage of town and country was to be brought about in a town of limited extent, which had as part of its area a large agricultural estate. By this means the inhabitants of the town, mostly engaged in industry, were near to the country, and the inhabitants of the country, mostly engaged in agriculture, were near to the town and shared in its social advantages. There was no barrier between town and country, yet the town was kept to its proper place, it was not allowed to spread itself over the countryside, and the country existed as true country, serving the town, and maintaining its own characteristic industry and natural beauty.

There is, perhaps, no need to discuss the town plan. Howard did not pretend to be a town-planner, and he was writing at time when town-planning as we know it did not



exist. There was not a town-planner in the country in 1898. His plan was a diagram merely, the object of which was to illustrate certain ideas, and nobody supposed that an actual town would be planned in the same form. As a diagram the plan succeeded in carrying out Howard's intention, which was the functional arrangement of the parts of the town, park-like features, dignity in the town's main thoroughfares, and compactness.



EBENEZER HOWARD'S DIAGRAM OF A WARD OF THE GARDEN CITY ('TO-MORROW,' 1898)

Undoubtedly the most interesting features of the plan were the wards, which were intended to be more or less self-contained. They were placed between the boulevards and consisted of a complete section of the town with residences and industries and included part of the central park and the Grand Avenue. There were six wards, with a population of about 5,000 people, each with its own schools and community life. Thus Howard anticipated the neighbourhood unit, which has become the favourite notion of town-planners in the present decade. The town-planners picked up the idea from the United States of America, so that it comes to them with authority, which appears to be of more significance than the fact that it originated as incidental to the scheme for the garden city.

Four chapters of the book were devoted to the financial aspects of the proposal, how the revenue was obtained, what it was devoted to, and the capital expenditure that was involved. The 'entire revenue' of the 'city,' said Howard, was derived from rents, which, however, was hardly correct, for the city was expected to have revenue from water, lighting, railway, and other undertakings. The rent referred to was the rent of the land, but it was not ground rent in the ordinary sense, nor was it to be assessed as such; for it was more in the nature of a tax for the use of the land, the benefits of living or trading upon it, and the value of the services provided by the community. He divided this rent into three parts: (1) 'Landlord's rent,' being that part of the rent devoted to the payment of interest on the cost of the scheme; (2) 'sinking fund,' being that part devoted to repayment of the cost; and (3) 'rates,' being that part devoted to public purposes. The rent was therefore termed 'rate-rent.'

The 'rate-rent' was assessed in the following way. The agricultural rents were fixed at the highest rent that could be got, and were to be kept at that figure by the tenant being given security for his holding only so long as he cultivated it satisfactorily and was 'willing to pay a rent equal to that offered by any would-be occupier, less, say, 10 per cent in favour of the occupying tenant—the incoming tenant having also to compensate the outgoing tenant for all unexhausted improvements.' The idea underlying this was that the farm tenants would be encouraged to maintain maximum production, while the full rental value of their holdings would always be secured.

It was assumed that the gross rental of the 6,000 acres purchased for the scheme was £8,000 per annum, and that the 5,000 acres of agricultural land surrounding the 1,000 acres on which the town was built would yield a rent on the same basis, plus 50 per cent (the tenants having no rates to pay and having a market at their doors), a total of £9,750 per annum.

The town rate-rents were assumed to be an average of £6 per lot a year, for 5,000 house building lots, the lots being let to the highest bidder. This would have produced an average annual rental (including rates) of £100.2 per acre. The rate-rents from factories and business premises were reckoned at £2 per employee, the number of employees being assumed to be 10,625. The total rate-rent from the town area would therefore be £34,250.

The rate-rent for the whole 6,000 acres was £64,000. This sum would be expended as follows:

Landlord's rent, or interest on the purchase money of £240,000 at 4 per cent	.	.	£9,600
Sinking fund over 30 years	.	.	4,400
Rates	.	.	50,000
			<u>£64,000</u>

This was, of course, an extremely simplified revenue position, which had little relation to reality. The figures did, however, appeal to many people because the knowledge on which criticism of them could be based was almost non-existent, the process of land development being little known. There is no need to discuss them.

The capital expenditure upon roads, circular railway, schools, town hall, library, museum, parks, and sewage disposal was to be £263,000. The cost of maintenance of these services, etc., and the interest, etc., on capital was to be met out of the £50,000 set aside for 'rates.' Maintenance amounted to £29,000 per annum; interest and sinking fund over a period of thirty years amounted to £15,315, a total of £44,315, leaving a balance of £4,685, 'for rates levied by local bodies within the area of which the estate is situated.'

Expenditure on water, lighting, markets, tramways, etc., was ignored, as these were assumed to be self-supporting.

The administration of Garden City was to be in the hands of a Board of Management, consisting of a Central Council and four departments, or committees, which were divided into sub-departments or committees. These committees were to be elected by the rate-renters, the chairman and vice-chairman of the committee constituting the Central Council.

A chapter was devoted to two matters which loomed large in the author's mind—shops and licensed premises. He proposed that shops should be established by co-operative societies and individual traders. The number of these societies and traders would be limited. For instance, a site would be let to 'a co-operative society or an individual trader in drapery of fancy goods' on a long lease at a rate-rent. That would be the only site 'which we for the present intend to let to any tenant engaged in your trade' and 'so long as you give satisfaction to the people of the town, none of the space' available for shopping purposes 'will be let to any one engaged in your calling.' If, however, the people became dissatisfied, 'then, on the requisition of a certain number,' a site was to be allotted 'to someone desirous of starting an opposition store.' Under this system of 'local option,' the trader was made to depend upon the goodwill of his customers.

If he charges prices which are too high; if he misrepresents the quality of his goods; if he does not treat his employees with proper consideration in regard to hours of labour, wages, or other matters, he will run a great risk of losing the goodwill of his customers.

It was pointed out that it would not be in the interests of the inhabitants to have many traders.

The members of the community, except for the purpose of bringing a trader to reason, will not only have no interest in bringing a competitor into the field, but their interests will be best served by keeping competition in the background as long as possible. If the fire of competition is brought to bear upon a trader, they must suffer with him. They will lose space they would far rather see devoted to some other purpose—they will be bound to pay higher prices than those at which the first trader could supply them if he would, and they will have to render municipal services to two traders instead of to one, while the two competitors could not afford to pay so large a sum in rate-rent as could the original trader.

The system of 'local option' was also applied to licensed premises for the sale of intoxicating drinks, and the author argued that while the administration of the garden city would 'have the power of dealing in the most drastic manner possible with the liquor traffic,' it would not be wise to prevent the establishment of licensed premises.



The reason for this is that such restriction 'would keep away the very large and increasing class of moderate drinkers,' and would also keep away those who are scarcely moderate in their use of alcohol but who needed to be brought under the healthful influences of Garden City. The community would, however, take care 'to prevent the undue multiplication of licensed houses.'

Howard was a believer in private enterprise, but it is clear that he believed that it should be under control. He thought that 'the control of an industry by the community was a half-way house to its assumption of it, should this prove desirable and practicable.' Thus a chapter was devoted to what he called 'pro-municipal' undertakings, and included under that head were all undertakings 'designed to further the well-being of the town' which were not actually conducted by the administration.

Only slight attention was given to the industrial activities of Garden City, but it is clear that apart from those which were designed to meet the needs of the inhabitants, which might or might not be conducted by the administration, the general productive work of the town would be in the hands of individual manufacturers, as elsewhere.

The Garden City which Howard described was intended to be an illustration of what towns should be like and 'to lead the nation into a juster and better system of land tenure and a better and more common-sense view of how towns should be built.' Howard did not put forward the idea that his town should be a peculiar thing built merely for the benefit of those who lived in it. He saw it as an example which would influence the whole course of city building and create a 'better form of industrial life generally throughout the country.' He saw the force of its example being brought to bear upon London until the vast city is reconstructed. 'Elsewhere new cities are being built: London then must be transformed. Elsewhere the town is invading the country: here the country must invade the town.' He says explicitly:

The reader is, therefore, earnestly asked not to take it for granted that the large cities, in which he may perhaps take a pardonable pride, are necessarily, in their present form, any more permanent than the stage-coach system which was the subject of so much admiration just at the very moment when it was about to be supplanted by the railways.

## § 11

It is probable that the most valuable as well as original chapter of Howard's book was one entitled 'Social Cities,' in which he described 'the true principle on which all towns should grow.' He formulated these principles by answering the question: Garden City is built up, how will it grow? 'It will grow by establishing—under parliamentary powers probably—another city some little distance beyond its own zone of "country," so that the new town may have a zone of country of its own.' Towns, therefore, should grow not by solid accretions, but by leaping over wide belts of open land, and forming new centres beyond them. Thus, 'town clusters would be formed, each town being distinct, with its own agricultural area, but the inhabitants of all the towns having a



common interest, sharing in each other's activities, and brought near together by means of rapid transit between them.' Howard based this idea on the growth of the city of Adelaide in Australia, the suburbs of which developed outside the area of the open land reservations around the city.

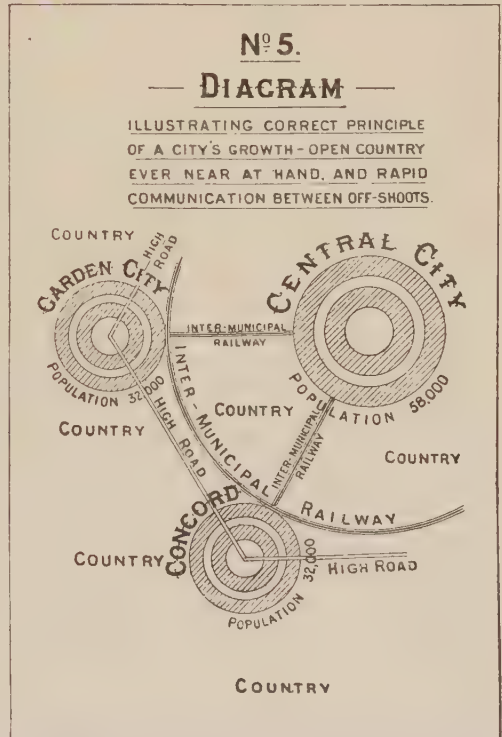
## § 12

The central idea of *To-morrow* was the 'effective belief in the economic, sanitary, and social advantages of common ownership of land.' It was because the land on which it was to be built was held by the corporation that built it that Garden City could grow in the form of the sister or satellite towns that have been described. It was the obtaining of the land at agricultural value and the retention in the hands of those responsible for the town of the increase in land values that gave the scheme its economic security.

The nationalization of land is not argued in the book, but Howard made it clear that the land surrounding towns should be in the hands of the town to prevent it from becoming 'ripe for building purposes,' and to enable the towns to grow in an orderly manner. The power to do that he saw to lie primarily in the ownership of the land.

The garden city was to be built, thought Howard, by the organized but voluntary exodus of people from the overcrowded towns. He used in support of his argument a proposal by Alfred Marshall that workmen should be induced through the efforts of a committee, aided by their employers, to migrate and form colonies in the country. Howard incorporated with that proposal the idea that as the migration of a large number of people to a given area in the country would be attended inevitably with a rise in the value of the land, provision should be made for securing the increased value to the people whose advent had caused it. Another element in Howard's idea was the combination of town and country life which is expressed in some words of John Stuart Mill in commenting upon Wakefield's *A View of the Art of Colonization* in these terms:

Wakefield's theory of colonization has excited much attention, and is doubtless destined to excite much more. . . . His system consists of arrangements for securing that each colony shall have from the first a town population bearing due proportion to the agricultural, and that the



EBENEZER HOWARD'S DIAGRAM OF SATELLITE  
TOWNS ('*TO-MORROW*,' 1898)

cultivators of the soil shall not be so widely scattered as to be deprived by distance of the benefits of that town population as a market for their produce.

That it was a 'unique combination of proposals' was Howard's claim for his scheme, and he stated them to be:

1. The proposals for an organized migratory movement of population of Wakefield and of Professor Marshall;
2. The system of land tenure first proposed by Thomas Spence and afterwards (though with an important modification) by Herbert Spencer;
3. The model city of James Silk Buckingham.

I have referred to what Marshall said, but there was not much in Wakefield's famous *Art of Colonization* (1849) that had bearing upon Howard's scheme, except Wakefield's idea that colonization should be organized, and the building of new towns has certainly much in common with colonizing projects. Wakefield had a theory of colonization which was entirely lacking in the politics of his day and has been ignored since.

The proposal of Thomas Spence made in a lecture delivered to the Philosophical Society in Newcastle in 1775, for printing which the respectable society expelled him, was that the land should be owned by the local community or by trustees for them, and that the rents should go into the parish treasuries:

Thus are there no more nor other landlords in the whole country than the parishes, and each of them is sovereign landlord of its own territory. . . . Then you may behold the rent which the people have paid into the parish treasuries employed by each parish in paying the government its share of the sum which the Parliament or National Congress at any time grants; in maintaining and relieving its own poor, and people out of work; in paying the necessary officers their salaries; in building, repairing, and adorning its houses, bridges, and other structures; in making and maintaining convenient and delightful streets, highways, and passages both for foot and carriages. . . . There are no tolls or taxes of any kind paid among them by native or foreigner, but the aforesaid rent, which every person pays to the parish, according to the quantity, quality, and conveniences of the land, housing, etc. which he occupies in it.

This was Howard's idea: not a centralized system of nationalization, but a system by which the rents realized in any locality went to the benefit of the locality; thus in his garden city the rents were to be the main revenues of the town.

In support of the doctrine that 'men are equally entitled to the use of the earth,' Howard quoted the opinion of Herbert Spencer, a great figure in Howard's world:

Such a doctrine is consistent with the highest civilization, may be carried out without involving a community of goods, and need cause no very serious revolution in existing arrangements. The change required would be simply a change of landlords. Separate ownership would merge in the joint-stock ownership of the public. Instead of being in the possession of individuals, the country would be held by the great corporate body—society. Instead of leasing his acres from an isolated proprietor, the farmer would lease them from the nation. Instead of paying his rent to the agent of Sir John and His Grace, he would pay it to an agent or deputy agent of the community. Stewards would be public officials instead of private ones, and tenancy the only land tenure. A state of things so ordered would be in perfect harmony with the moral law. Under it all men would be equally landlords; all men would be alike free to become tenants.

Herbert Spencer, however, changed his mind, and later regarded the public ownership of land as too difficult to effect, unless men were to migrate to a new planet. Howard's

comment was that to migrate 'from overdeveloped, high-priced land to comparatively raw and unoccupied land' was equivalent to migration to a new planet and would enable a 'life of equal freedom and opportunity' to be lived.

The third proposal that Howard claimed to have combined with the other two to form his scheme was that of James Silk Buckingham, to which attention deserves to be given. Buckingham was a characteristic nineteenth-century idealist, traveller, and advocate of peace, free trade, temperance, public libraries, and the abolition of slavery, who, in a book entitled *National Evils and Practical Remedies* (1849), put forward a scheme for building a model town as a means of absorbing the unemployed community. A Model Town Association was to be formed as a private venture, with a capital of three million pounds, to purchase 10,000 acres of land, on 1,000 acres of which a town of 10,000 people was to be built, and named 'Victoria' after the young queen. Buckingham's design for his town was square in shape, and one can see that Howard borrowed from it in the main his notions of planning. The land and all the buildings were to be owned by the association, which was also to run the industries. There was to be an eight-hour day observed in the factories, medical service, nurses for children, and education were to be free, and there were to be public baths, public kitchens and laundries. Neither intoxicants nor tobacco were to be allowed. Dividends on the capital were to be limited to 10 per cent. All inhabitants were to hold at least one share of £20 in the association, and the balance of net profits was to be divided proportionately among the resident members of the association. This was a well-thought-out scheme, and an improvement upon Robert Owen's earlier 'parallelograms'; but although Buckingham got much support, he received nothing like enough to enable the project to be started. There is no doubt that Howard took a great deal from Buckingham, whose work is not, therefore, to be looked upon as fruitless.

### § 13

There were, of course, many others who contributed to the conception that was given the name of the garden city; for the possibility of building towns with the advantages of science and worthy of our civilization had appealed to many creative minds, and Howard borrowed freely. There is no evidence that Howard had read the writings of Charles Fourier (1772-1837), but he seems to have had much in common with that philosopher. Howard hated extremes; he believed in organization, in co-operation, and in back to the land, and Fourier's self-contained community 'Harmony' was in name and character exactly after Howard's own mind. We can have little doubt that Howard was influenced by the project made in the late eighties of last century for a co-operative industrial, educational, and residential settlement in the neighbourhood of London under the auspices of Davidson's New Fellowship. He must have known about the project, but Howard was always very reticent about anything connected with the inception of his ideas. The truth is that the invention of the garden city was the result of



the joint work of many people, most of them nameless, but it rightly bears the name of Ebenezer Howard, as the locomotive bears the name of George Stephenson. Howard did, in fact, not merely invent the idea but was responsible for its being carried out, and in Parts II and III of this book are described the foundation and development of the first garden city, Letchworth, in 1903, and the second garden city, Welwyn Garden City, in 1919.

#### § 14

The initial steps in the founding of these towns was taken by Howard himself. He was associated with others, it is true, and did not work alone, but his was the initiative and his the driving force. Neither town would have been built without him. Yet he was no organizer, and was not in the ordinary sense of the word a practical man, so that apart from providing the original impetus he had little or nothing to do with the building of either town. He was a member of the board of directors of both companies, attended their meetings regularly, and was listened to on all subjects, but he did not pretend to abilities that he did not possess. He lived at Letchworth almost from the start, and afterwards at Welwyn Garden City, and was, of course, a familiar figure in both towns, and was highly honoured in both. But these towns, though owing their origin to him, are his work neither in their planning nor in the execution of the plans. He had in both of them the part of a spectator and commentator upon what was done, and except for a share in some minor enterprises, he made no major contributions. He was the 'father' of the movement. He was made an O.B.E. in 1924, a curious honour for such work as his, and knighted in 1927. Bernard Shaw said on the latter occasion that

Sir Ebenezer should have had a barony for the book, an earldom for Letchworth, and a dukedom for Welwyn, and I am not going to congratulate him on such an inadequate acknowledgment of his great public service as a knighthood.

He died on 1st May 1928, and was buried at Letchworth. The first small park at Letchworth is known as Howard Park in his honour, and the main approach to the railway station at Welwyn Garden City is called Howardsgate after him, where, in the centre, there is also a plain brick memorial, bearing the words 'Ebenezer Howard founded this town.'

#### § 15

The publication of Howard's book aroused much interest, which was increased by the start made, seven years later, upon the building of the first garden city.

At this time, the development of electric transportation was a new element in the suburbanization of London and other cities, and the attention that the advocates of the garden city movement paid to the need for planning gave support to those who were bringing to the notice of local authorities the methods of the municipal authorities in Germany in controlling the growth of their towns. The Manchester social reformer, T. C. Horsfall (1841-1932), friend of John Ruskin, and patron of art and education,



wrote a report on *The Example of Germany* (1904), which became the text-book of these early advocates of town-planning, though the Oxford Dictionary finds the earliest reference to the use of the term to be 1906. Horsfall did not refer to 'town-planning,' but to 'building-plan,' by which he meant the lay-out of roads. Earlier, Edwin Chadwick's great *Report on the Sanitary Condition of the Labouring Classes of Great Britain* (1842) had contained lengthy references to the value of town-planning; but the campaign for public health, which that report set in motion, found no place for town-planning ideas. Indeed, until Horsfall took it up, town-planning was an unknown subject in this country, of no interest to architects or engineers, municipal governors, or economists, though Alfred Marshall had referred to the influence of town-planning upon industrial efficiency in his *Principles of Economics* (1890), but even he did not use the term. It was strange that economists paid no attention to the effects upon industry of lack of provision for industrial location. This is one of the evidences of the defects of the science of economics, which treated economic developments as though they were the outcome of natural forces, not the results of human intelligence. Howard's garden city is to be regarded as one of the means through which the economics of cities has become the study of an aspect of national life. It was the foundation of the garden city that drew public attention to the value of town-planning, with the result that a movement in favour of legislation on the subject was set in motion, reinforced by the experience of technical men and others who visited Germany in large numbers to study what was being done there.

### § 16

Very soon, in 1907, there was a scheme for a 'garden suburb' initiated by the social reformers Canon and Mrs. Barnett upon 240 acres of land they had acquired adjoining Hampstead Heath with the object of building small houses and demonstrating the advantages of planning. This scheme coincided with the construction of the new electric railway to Golders Green, which almost adjoined the estate, and enabled a large area of land to be exploited on a hitherto unheard-of scale for residential development and to make many fortunes. The Barnetts were skilled in publicity, and the new scheme quickly took the foremost place as an example of town-planning and housing. Hampstead was easy to get at, and with the energetic activities of the co-partnership tenants, which found the estate admirably suited to them, the scheme occupied a large place in the public mind and obscured the real garden city that had been started at Letchworth, the story of which is told in the second part of this book. Letchworth was rather far away, and people went to Hampstead to see what Letchworth was like. In fact, the project was described as 'The second of the great schemes inaugurated on garden city lines.' The architect of the first garden city, Raymond Unwin, had ended his connection with Letchworth and went to live in an old house belonging to the suburb in which he continued to live for the rest of his life. This fact, and the further fact that support for the establishment of the garden suburb was taken up enthusiastically by the body

responsible for the garden city, the Garden City Association, increased the confusion as to the respective characteristics of a 'garden city' and a 'garden suburb.' Indeed, the terms became interchangeable. Hampstead was often referred to as a garden city and Letchworth was frequently described as a garden suburb. Before long there was a 'garden suburb movement' which was described as the development of estates in suburban areas on 'garden city lines.' An account of this movement was given in *The Garden City Movement Up to Date* (1913), compiled by Ewart G. Culpin, the secretary of the Garden City Association. In a later edition of that book (1914) it was stated that:

. . . many of the schemes that are called garden city schemes have nothing in common with the garden city movement but the name, which they have dishonestly appropriated. Schemes of the wildest speculation, land-sweating, and jerry-building, have all been promoted in the hope that the good name would carry them through.

The fact that none even of the schemes described in that book with the exception of Letchworth had any title to association with a garden city movement was not pointed out. The effect of this confusion was that the significance of the garden city as an alternative to the suburban growth of cities was overlooked, and the general public no less than technical men and writers in general, and even writers on town-planning, took their ideas of what a garden city was from the misapplication of the idea that was found in suburban land developments. For instance, one of the latest and most intelligent writers on architecture, the Swiss architect Sigfried Giedion, in a book published in America, *Space, Time, and Architecture* (1944), says:

The building of a garden city never exerted any influence on the rebuilding of a great modern capital. The most that resulted was the creation of new suburban settlements by co-operative societies and the introduction of better architectural schemes, but for the most part the idea degenerated into the building of conglomerations of small houses in small gardens.

Such criticism as this, which exposes thorough misunderstanding of the facts, is common, and made by writer after writer who does not examine the matter for himself. For the wide currency of this misunderstanding, Raymond Unwin and nearly all the advocates of the garden city must be regarded as responsible. Unwin was wedded to Hampstead Garden Suburb after his divorce from Letchworth, and continued his affection for his second love even after he left its service to enter official employment. Of course, Unwin knew the difference between the garden city and the garden suburb, and did not hesitate to point out the superior advantages, at least in theory, of the garden city; but it cannot be denied that the weight of his influence was not in the direction of the garden city. Neither, in fact, until within comparatively recent years was the influence of any of those who were associated with the garden city movement, with a few negligible exceptions, given to the garden city. Their influence and interest were devoted to garden suburbs or garden villages or to mere housing, or even to town-planning, and in this fact must be ascribed the almost complete obscurity into which fell the ideas for which the garden city stood from about 1909 until after the first war in 1919, and to continued confusion in the public mind.

## § 17

During this period, the first experiments in town-planning by local authorities were being made. In 1909, John Burns's Housing, Town-Planning, etc., Act became law, and local authorities were able to prepare plans to control land likely to be used for building purposes in their areas. This planning was done under the supervision of the central authority and was so hedged about with restrictions and so cautiously handled administratively that hardly any authorities dared to tackle it. In any event, it was merely suburban planning and encouraged those cities, of which Birmingham is an example, which were bent on suburban aggrandizement, to plan for growth in advance. The garden city enthusiasts, however, lost themselves in admiration of the merits of the Act, and changed the name of their association to that of the Garden Cities and Town Planning Association. The Act also called into existence the town-planning profession, which was at first defined to include architects, engineers, surveyors, and lawyers, and the Town Planning Institute was formed in 1914, its initial membership consisting of sixty-four members of the four professions, hardly any of whom had had any opportunity to gain the smallest experience of town-planning in any form. The institute drew up an examination syllabus in 1916, and since 1930 a joint examination board has existed, which now conducts examinations for a town-planning diploma.

## § 18

During the six years before the start of the first war the deficiencies in the legislation of 1909 became evident, while the suburban growth of towns, checked to some extent by the Liberal Government's land legislation, was more and more an obvious social menace, increased by the influence of the new motor transport. Thus immediately after the war in 1919, when housing became a pressing governmental responsibility, an Act was passed compelling local authorities with a population of more than 20,000 to prepare town-planning schemes for their undeveloped areas by 1926, the period being extended by subsequent legislation, first to 1929, and afterwards to 1934. After several further attempts at legislation, the comprehensive Town and Country Planning Act, 1932, was passed, which remained in force until repealed by the Town and Country Planning Act, 1947, which put town-planning on an entirely new basis, and is to be regarded as the first serious, though still tentative, attempt at town-planning in any constructive sense that the country has known.

As it does not fall within the scope of this book to give a history of town-planning, the subject is not pursued in more detail. Were we to do so, we should see that while the planning aspects of the garden city were recognized its other aspects were ignored, although in the legislation of 1919 and subsequently powers were taken to enable land to be acquired and advances to be made for the building of garden cities by local authorities or authorized associations. The expression 'garden city' was defined in the Act as



including 'garden suburb or garden village,' which reflects the general uncertainty as to the exact scope and specific meaning of the term. It reflects, too, the lack of conviction as to the value of the thing. In fact it was common for municipal housing schemes, especially if on a large scale, to be described officially as garden cities, and it was with some difficulty that, for instance, the London County Council's great housing project at Becontree was in 1919 prevented from being known as a garden city. There was also an increasing disposition to use the term for speculative building enterprises. The Council of the Garden Cities and Town Planning Association was therefore induced to consider the matter and, after inquiry, adopted in 1919 a definition of a garden city, drawn up by the present writer, in the following terms:

A garden city is a town designed for healthy living and industry; of a size that makes possible a full measure of social life, but not larger; surrounded by a rural belt; the whole of the land being in public ownership or held in trust for the community.

The value of such a definition was a very practical one, and enabled a test to be readily applied to any proposed scheme. The definition had five parts. (1) A garden city is a town, not a village or a suburb; it has, that is to say, its own civic and corporate life, and should possess those economic and other characteristics that belong to towns. (2) It has a town-plan in which provision is made for healthy living for all classes of the community and for industry. (3) The town is of a size that makes possible the enjoyment of the social and other advantages that towns can provide, but is not larger than is necessary; in other words, the town is limited in size to an area and population required by social and economic needs. (4) The town is surrounded by a rural belt so that the benefits of country surroundings are permanently secured and agriculture becomes an integral part of the town's economy. (5) The whole of the land is in public ownership or held in trust for the community, so that the community secures the economic advantages from the increase in land value arising from the increase of population.

Despite the adoption of the definition above mentioned, the misuse of the term garden city continued in this country and abroad. Though many housing and estate development schemes in most countries of the world might quite properly have been regarded as owing something to garden city ideas, to call them garden cities was entirely unjustifiable. The fact that Raymond Unwin popularized 'twelve houses to the acre,' which he called 'the garden city type of development' (*Nothing Gained by Overcrowding*, 1912), accounts, perhaps, for a good deal of the incorrect use of the term 'garden city.' Many people thought that to lay out a site with ample garden space was to plan on 'garden city lines.' Indeed, it is probable that town-planners themselves have been too much inclined to accept the principle of open development, without giving sufficient attention to the effect of such development upon the size and structure of towns. Some characteristic remarks of the late Sir I. G. Gibbon, who at the time was one of the assistant secretaries of the Ministry of Health, have force in this connection. He said:

I confess that at times I become a little weary of the constant harping on so-called 'development on garden city lines'; it is a green cloak for so much ignorance and flabby thought. I am almost



persuaded that one of the dangers which confronts town-planning at the present time is this loose talk of 'garden city development.' I do not wish to be misunderstood. I have keen sympathy with the ideals of those who are pressing for the development of garden cities and who know of what they are talking; but little sympathy with those (and indeed they easily become a nuisance) who think that the one end of town-planning is to obtain housing development on what they are pleased to call 'garden city lines.' (*Garden Cities and Town-Planning*, December 1924, p. 253.)

### § 19

The extent of the misunderstanding about the garden city and the dislike that it has caused to arise in the minds of those who are looked upon as serious exponents of town-planning is shown in the writings of Thomas Sharp, who has acquired a leading place among writers on the subject. He has no patience with 'the dream of the romantic garden city,' he says, but he accepts the 'essential sanity of the satellite town idea.' However, his description of the satellite town in *Town Planning* (Pelican Books, 1940) is excellent:

But the advocates of the satellite town theory of city development do not dispute the considerable attractions that the great city has to offer to socially-inclined distraction-seeking humanity. They recognize . . . that the great city offers attractions in theatres, concerts, football matches, technical institutions, universities, learned societies, departmental stores, restaurants, shopping streets, and in a hundred other ways which the small town cannot provide. All that they maintain is that these attractions can be made available without the disadvantages that are also attendant on Megalopolis. They maintain that the method of development should be regional rather than solidly megalopolitan. To avoid the evils of over-centralization they advocate sub-centralization: not *de*-centralization (though that is the term that has most often been used by the garden city advocates who confuse the satellite town idea)—not *de*-centralization, for that would involve the loss of the attractions which can only be centrally provided: but *sub*-centralization for certain purposes, round a lessened centre maintained for other purposes.

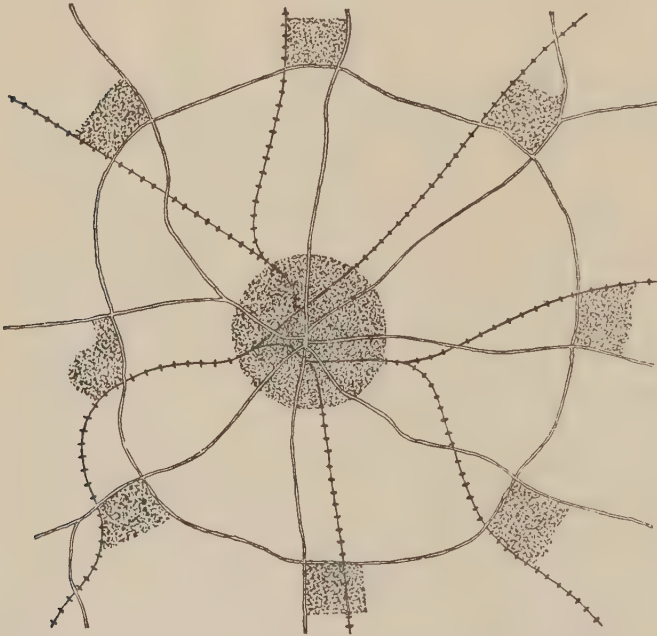
The distinction between decentralization and sub-centralization hardly seems worth making; for it was never suggested by Howard, or by any of the writers following him, however carelessly the latter may have written, that all the functions of the city should be decentralized. Mr. Sharp hesitates, however, and makes qualifications that at first seem to indicate that he is not really anxious to commit himself to ending the spread of the great city; for, he says, 'the satellite towns and the central city will together constitute one city, a regional city': the meaning of which is somewhat obscure, until we read that the satellite town 'should have at least some measure of local government,' which suggests that the satellite may perhaps be looked upon as a sort of suburb after all. The diagram that Mr. Sharp prints of satellite towns around a central city gives the impression that the satellites must not be really large. Later, however, he refers to satellites of 100,000, and he says plainly that 'there should be at least five miles of country between each satellite,' and he wants every satellite town to 'be a genuine town,' which show that he has the right idea after all. The present writer has no quarrel with his final words:

There is nothing impracticable in such an ideal. It requires no demolition of existing cities. All it envisages is the organization of future growth. All that is necessary for its attainment is

the use of common sense and imagination in the management of human affairs. We could make a beginning towards it to-morrow if we cared. We could have made a beginning at any time in the forty years during which the idea has been widely advocated—and if we had, we would now have dozens of fine civilized towns instead of the vast disorganized spread of Greater London, of Greater Birmingham, Greater Manchester, Greater Liverpool, Greater Glasgow, and all the rest of the greater Gargantuas that we have achieved instead.

As for the demolition of cities, no doubt Mr. Sharp has by this date changed his mind.

Efforts were made from time to time, and especially in connection with the housing programme after the first war, to get recognition by the Government of the garden city idea, and attempts were made to induce local authorities with large housing commitments to undertake the building of satellite towns. None of these endeavours to interest public authorities in Greater London and elsewhere succeeded, until at last the principle of new towns was accepted after the second war, an account of which will be given later. Municipalities were shy, and no large landowners among those who might have been



THOMAS SHARP'S APPLICATION OF THE SATELLITE TOWN IDEA:  
A CENTRAL CITY WITH SATELLITE TOWNS AROUND IT (1940)

thought to be directly interested in such an enterprise showed a disposition to engage in it. Under the influence of Mr. E. D. Simon, now Lord Simon of Wythenshawe, the Manchester City Council decided in 1926 to build what it called a town on 2,568 acres of land it had acquired outside its boundary in Cheshire; but the corporation would not proceed until Parliament allowed it to incorporate the land within its area, the permission for which was secured with some difficulty. The reasons for this decision by the city authorities are easily understood; for although they had the power to build and develop the site and would have possessed the powers of landowners, they would not have had any local government authority, which would have presented them with some difficulties, and, in any event, to be able to exercise that authority was the status with regard to the scheme that they most desired. The result is that the well-known Wythenshawe scheme included within the city of Manchester by the Manchester Extension Act, 1930, created no more than a suburb. The entire area, only part of which is owned by the corporation, is 5,567 acres, and the ultimate population is to be 100,000; but

although the scheme is large and well designed, contains industrial areas and has a small green belt separating it from the rest of the city, it does not come within the definition of a satellite town. Wythenshawe is not a town, but the ward of a city, and has all the characteristics of a suburb in appearance as well as in its essential civic character.

Another large housing scheme, undertaken by the corporation of the city of Liverpool at Speke, is constantly referred to as a 'satellite town' or a 'garden city'; but it is no more than a suburb, though a large one. The Minister of Town and Country Planning correctly described both these schemes when introducing his New Towns Bill on 8th May 1946. He said:

I do not count Wythenshawe or Speke as new towns because, excellent as they are in many respects, I regard them not as self-contained communities, but as suburbs of Manchester and Liverpool respectively, with many of the characteristics of suburbia.

London is, of course, the city for which satellite town development is most obviously necessary; but it was impossible to get the London County Council to take action. A proposal for building satellite towns was considered by the council in 1936, which could hardly have been avoided, for since 1918 the building of satellite towns had been part of the official policy of the Labour party, and the London Labour Party in 1934 had advocated the creation of such towns as an important element in its housing policy and its attack upon the slums. Mr. Herbert Morrison, the leader of the party, had declared himself on more than one occasion to be in favour of satellite town building, and in an article in the *Evening Standard*, 9th January 1936, made his position abundantly clear:

Not only would I wish the solid urban sprawl of London to be checked, but I would like to see contiguous London cover a much smaller area than it does at present. . . . I would take the industries and businesses that need not be in the heart of London, bodily out of the heart of London. . . . I would take those industries right out into the home counties. . . . I would plan in association with those industries, new self-contained, independent satellite townships, something on the lines of Letchworth and Welwyn. . . . *For most purposes these townships would be physically separated from London.* I would do what I could to help them to have a cultural and social life of their own so that they were complete and that they enjoyed a public, collective, and social life of their own.

It would be my endeavour to secure that the people who worked in those towns, lived in them; that they could walk to and from their employment; and that the garden cities all possessed open spaces and were surrounded by agricultural and other land unbuilt upon, so that residents could easily walk to the open country.

All the same, nothing was done. The project was, no doubt, too difficult for the administration, and the political advantages were absent, much responsibility and work was involved, and, when it was brought down to practical issues, it was considered better to leave the matter alone. Thus London remained without the building of satellite towns, except for the two garden cities, until the second war proved that large cities were doomed and steps had to be taken to disperse population, which has now become national policy.



## § 20

The garden city, let us say in concluding this section, is the alternative to suburbia. Is there any other alternative? Despite le Corbusier, and those who follow him, I do not think there is; for they have not produced one with a rational basis. Neither in America nor elsewhere is there an equivalent to the garden city. Soviet Russia is doing no more than to imitate American big buildings and big cities and is making no constructive contribution to town development. Everywhere we find the Leviathan notions of towering cities, one city built upon another, formless and undefined, possessing no qualities that appeal to the heart, to the sense of individuality, or to what belongs to the humane qualities of life. The garden city is anti-Leviathan, for it makes the home its central feature, it includes the factory and workshop, shops and civic buildings, with an architecture that has its inspiration in a creative and civilized existence. The garden city makes suburbs and dormitory housing schemes unnecessary, replacing them by the genuine town. The garden cities may be looked upon as among the tangible signs of new life when the foundations of society were crumbling:

So rise, enchanting haunting faithful  
Music of life recalled and now revealing  
Unity; now discerned beyond  
Fear, obscureness, causality,  
Exhaustion, shame, and wreck,  
As what was best,  
As what was deeply well designed.

Through the garden city the city may be renovated, renewed, revitalized, and built over again. Through it the city may be relieved from the pressure of population and of overcentralized government. In the following pages of this book the developments of the garden city will be dealt with and what led up to them will be related. We shall proceed to tell the story of the two garden cities, how they were built, their problems, and how and to what extent those problems were overcome. It is, as the reader will find, a fascinating story from which much is to be learned. Nowhere in the world do there exist enterprises of a similar character or that possess an equivalent concentration of practical economic and political lessons for our time.



PART II

LETCHWORTH, THE FIRST GARDEN CITY



## CHAPTER I

### ITS ESTABLISHMENT AND GROWTH

*Broadbent.* Have you ever heard of Garden City?

*Tim [doubtfully].* D'ye mane Heaven?

*Broadbent.* Heaven! No; it's near Hitchin. If you can spare half an hour I'll go into it with you.

BERNARD SHAW, *John Bull's Other Island* (1904)

#### § 1

LETCHWORTH, the first garden city, was established to give effect to the proposal for a new kind of town described by Ebenezer Howard in his book *To-morrow*, of which an account has already been given. There were elements in Howard's scheme that placed it in a different category from that of the utopias and idealist communities that have fascinated imaginative minds throughout the history of the world. The scheme had a plain, common-sense air that caused it to appeal strongly to people of very different opinions. Indeed, it may be said that the primary merit of Howard's proposal was that almost every one could see something in it that he liked. 'I have taken a leaf out of the books of each type of reformer and bound them together by a thread of practicability,' said Howard; and it was true. The socialist liked it because of its semi-municipal character, and at the beginning of the century socialism on its practical side was strongly pro-municipal; the conservative because it promised a way in which private enterprise could help to solve the housing question; the liberal because it was a project of land reform. People of every shade of political thought, and of every state of society, readily gave it support. A manifesto issued in 1902 sets forth the main features of the proposal as it was then conceived.

The exodus of the people from the country, and the consequent overcrowding in the towns, with its attendant physical and moral evils, occupies the attention of all who are interested in social reform. The future of Great Britain depends on the solution of this great problem. It cannot be effectively dealt with in existing towns owing to the high price of land, the value of which increases in proportion as better facilities and improved sanitary conditions are provided. The problem is so acute that the Public Health Acts cannot be enforced in certain slum areas, even though the general health of the people is involved.

Agricultural depression has become chronic in the rural districts, our industrial supremacy is being threatened, and the vigour of the race is being impaired.

Legislation is required, but the problem is too urgent to wait, and while waiting something may be done not only to provide an instalment of reform, but also to show the way for future Acts of Parliament; how to alter the economic conditions so that the people may be induced to go 'back to the land,' so that agriculture may be brought nearer the home markets, and attract more capital; so that factory life may not involve disease, degeneration, and early death; so that the vast wealth accumulating in the pockets of private landowners, as a result of the collective activities of the people, may be diverted into the proper channels, and used for the uplifting of the people as a whole, so that intemperance may not be, as in many cases it is, the direct result of environment, is the problem of to-day, which the creation of garden cities will help to solve.

The garden city project is not merely an aesthetic idea to provide gardens, nor to force better habits on the people.

It is an attempt to secure justice for the people by constitutional means, by diverting the increment of value attached to the land into the pockets of those who create that value. It will help them to educate themselves. It is an experiment of the first magnitude in effective social reform.

It is not a Utopian dream, delightful in theory but unworkable in practice.

It is a practical scheme, which in some of its most important bearings has been successfully tried, and has a sound financial basis, resting upon the increase in the value of the land caused by an influx of population.

It is not an attempt to create an artificial movement among manufacturers to migrate into country districts.

It is an effort to direct and accelerate the migration which has already begun on a very extensive scale in all parts of the country.

The building of the first garden city will be begun as soon as a suitable estate can be acquired. The land will be purchased at agricultural prices, and the town laid out section by section on a premeditated plan, by the aid of manufacturers and others who agree to take sites. Each house will stand in its own garden, and the town will be surrounded by a permanent belt of agricultural land. The necessary capital will receive a limited return, and the balance of the increment would be applied for the benefit of the community.

The characteristic and clearly defined feature of the scheme was that it combined private enterprise with the public interest. The increment of land value was its financial basis. That land purchased at agricultural value would be given urban value by the establishment of a town upon it was something that people could understand, and that the increased value should be used for public purposes was a proposition that appealed to the sense of fairness in the average man; it violated no political or economic principles, and had no opponents.

The factor, however, that commended the scheme most strongly to the largest number of people was that it was put forward as an endeavour to relieve the overcrowding of the towns and to repopulate the countryside. Alfred Marshall, the economist, regarded the garden city for that reason as eminently practicable. Among the large number of eminent and well-known people who applauded the idea were Bernard Shaw, who said that 'nothing private enterprise can do appears to me more likely to succeed than this idea of organizing new cities,' and A. J. Balfour (as he then was), who expressed his 'agreement with those who think that much is gained by the migration of industries from overcrowded cities to rural, or comparatively rural, districts.'

The object-lessons of W. H. Lever (afterwards Lord Leverhulme) at Port Sunlight, and George Cadbury at Bournville, were much in the public eye at the time; for they were the well-publicized efforts of great and successful industrialists: they demonstrated the complete feasibility of establishing factories and an industrial population in rural or semi-rural districts, and the powerful support given to the project by these two leaders of industry gave it definite standing. It was, in short, agreed on all hands to be an essentially practicable proposal, and though the details of it were open to discussion it arrested attention by its obvious common sense.



## § 2

In June 1902, then, after the ways and means of giving effect to Howard's scheme had received a good deal of consideration, a public meeting was held at the Holborn Restaurant with Earl Grey in the chair, when a proposal for forming a pioneer company was approved, and in the following month a company was formed under the Companies Acts, with the title of The Garden City Pioneer Company Ltd., to investigate sites and to take the preliminary steps for the establishment of the first garden city. This company had a share capital of £20,000. It was not proposed to pay any dividend on the shares, but the shareholders were to receive shares in the ultimate company equal to the amount of their holdings, plus interest at the rate of 4 per cent per annum. A prospectus was issued in the ordinary way, and the share capital was very quickly subscribed by persons interested, among whom was the late Lord Northcliffe, who offered free advertising space in the financial columns of the *Daily Mail*.

The pioneer company immediately got to work and a large number of estates in many parts of the country, most of them much too small or otherwise unsuitable, were considered. Among all the directors of the company, Howard took the most active part in this work of investigation, and got himself made managing director, so that he could devote the whole of his time to the work, giving up his profession for the time being. He had sensible ideas, and he certainly understood the application of the main principles of his scheme to possible sites; the necessity of finding an area within a ring fence of approximately six thousand acres, on which there was the minimum of building, was the main thing. Communications were vital, of course, so that the site had to have a main railway line running through or near it; and it had to be near a large centre of population. The Chartley estate in Staffordshire, about eight miles north-east of Stafford and 140 miles from London, was almost decided upon, but, at the last moment before the contract was signed, the solicitor of the company, Herbert Warren, who had a business at Baldock in Hertfordshire, put forward a proposal for joining together a number of properties between Baldock and Hitchin, which, though not totalling so large an area as was desired, was considered to constitute by far the best site available, and within a year the pioneer company had entered into contracts for the purchase of the properties that made up the future Letchworth estate.

There can be no doubt that the decision was a wise one, if only for the reason that the estate was sufficiently near London not to be isolated, and yet was far enough away to be in no danger of acquiring suburban characteristics. Recognition of the skill of the solicitor, aided as it was by the local knowledge and negotiating ability of his clerk, James Brown, in acquiring the estate, deserves to remain on record. The latter was really responsible for the whole affair. He had the help of William Onslow Times, a famous Hitchin solicitor, in the endeavour to get for the company the estate on Hitchin Hill that ran into Walsworth and Wymondley, the ultimate failure to secure which was a marked disadvantage to the scheme. It is ironical to recall that Herbert Warren, the

solicitor to the undertaking, who put the proposal to the board, was a true cockney, who, though he had an office in the country, was always unhappy out of London.

In September 1903 the First Garden City Ltd. was formed to complete the contracts and to establish the town. An opening ceremony took place on 9th October 1903, when over a thousand guests were entertained to luncheon in a marquee in a field near Letchworth Corner. They were brought to the estate by special train, either to Hitchin, whence they travelled by horse conveyance, or to a temporary station on the estate, which was approached by temporary roads. The day was extremely wet and cold but the gathering was enthusiastic. The chairman was the Right Hon. Earl Grey, and supporting him were George Cadbury, W. H. Lever, Ralph Neville, Viscount Peel, and John P. Thomasson. The chairman complimented Howard upon the remarkable success he had attained, and said:

It is admitted on all hands that most of the larger cities of England, owing to their ill-regulated and archaic growth, have become the very cankers of our body politic, and they are sapping the strength and poisoning the character of the people.

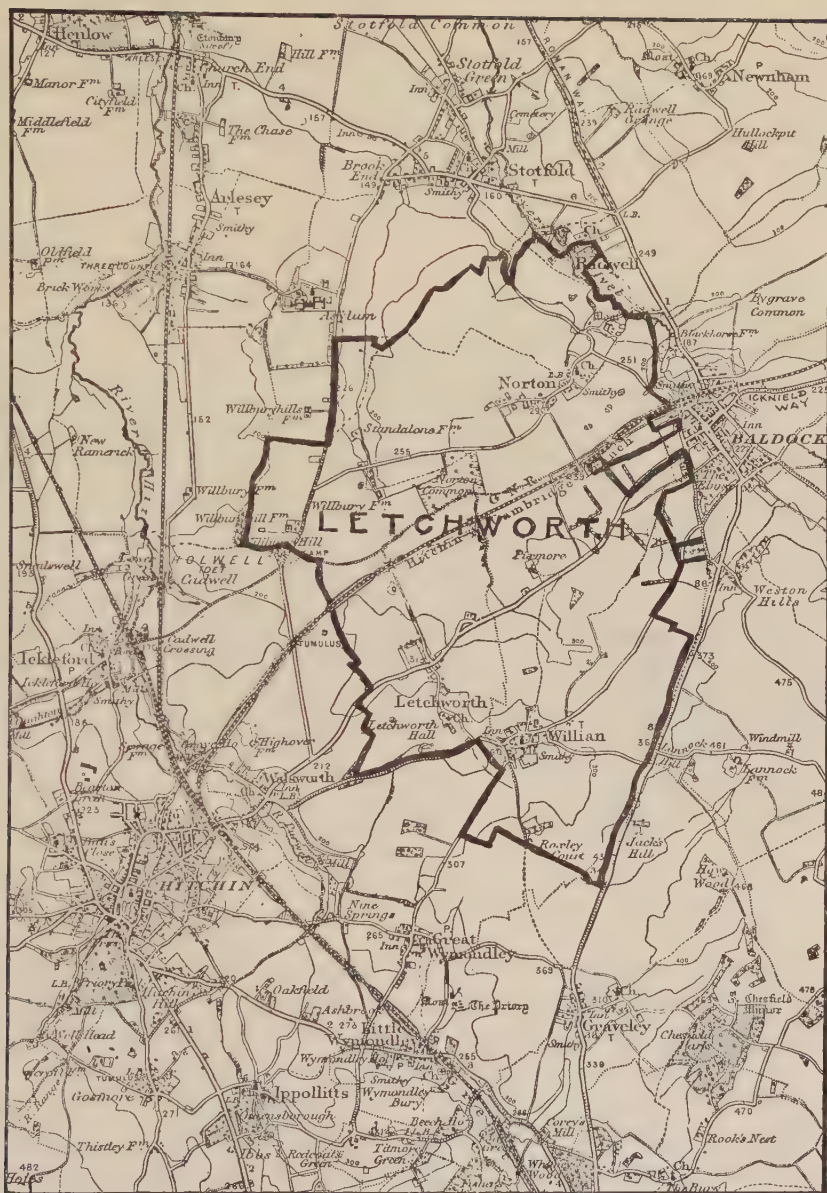
This set the character of the garden city undertaking and indicated the task it was intended that the builders of the new town should fulfil.

### § 3

First Garden City Ltd. was incorporated under the Companies Acts, and had an authorized share capital of £300,000. The object of the company as expressed in its memorandum of association was:

To promote and further the distribution of the industrial population upon the land upon the lines suggested in Mr. Ebenezer Howard's book entitled *Garden Cities of To-morrow* . . . and to form a garden city, (that is to say) a town or settlement for agricultural, industrial, commercial, and residential purposes or any of them in accordance with Mr. Howard's scheme or any modification thereof.

The property purchased by the company consisted of 3,822 acres, obtained by private treaty from fifteen different owners for £152,751, and costing, after payment of legal expenses, etc., and the costs of the pioneer company, a total of £160,378, or an average of £42 per acre. The estate was  $34\frac{1}{2}$  miles from London on the Great Northern Railway branch line to Cambridge, which bisected the estate diagonally from south-west to north-east. The old market town of Hitchin was  $1\frac{1}{2}$  miles from the western boundary and the little town of Baldock adjoined it on the east. The village of Letchworth consisted of twelve cottages, a manor house (partly disused), a church and rectory, and a population of about fifty; it was so very small that it did not contain an inn or a post office or a shop of any kind. The area of the parish was nearly one-third of the whole property. The estate also included Norton village, with one or two largish houses, a few cottages and farmhouses, a vicarage, church, inn, and a population of 200; part of the village of Willian on the south, which had a population of about 200; and a small



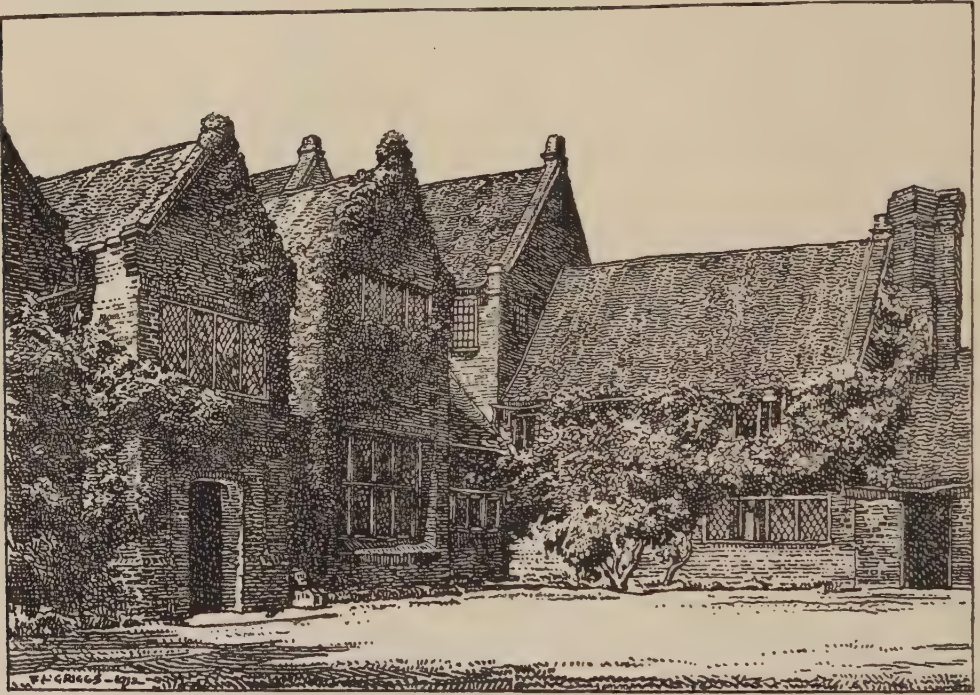
### THE GARDEN CITY ESTATE AND THE SURROUNDING COUNTRY IN 1903

The area marked on this map includes that of the additional land, to the south of Willian, purchased in 1912.

*Reproduced with slight alterations from the Ordnance Survey Map, with the sanction of the Controller of H.M. Stationery Office*



part of the village of Radwell on the extreme north-east. All the villages were on the outskirts, the centre of the estate, through which ran the railway, being entirely devoid of buildings; it consisted of gently undulating land, practically all of it under cultivation, about 300 feet above sea-level. The estate sloped away from a central plateau in every



LETCWORTH HALL AS DRAWN BY THE LATE F. L. GRIGGS

This Jacobean building was in use as a farmhouse at the time of the purchase of the estate and is now a hotel.

direction, giving at various points very fine views towards the south-west, west, and north-east. There was no great amount of timber, only a number of small coppices, and the estate possessed few attractive features except a piece of common land of about seventy acres adjoining the ancient Icknield Way. Through the common ran the little stream called the Pix, which finally made its small contribution to the Ouse; on the common were swampy patches, but it was notable for its elder and great hawthorns, part, no doubt of the primeval forest, and this wild stretch relieved what would otherwise have been a rather monotonous piece of country, though characteristic of northern Hertfordshire.

The prospectus explained the objects of the new company as follows:

The company has been formed to develop an estate of about 3,800 acres, between Hitchin and Baldock, on the lines suggested by Mr. Ebenezer Howard in his book entitled *Garden Cities of To-morrow*, with any necessary modifications. It is believed the result will be not only to promote a great social improvement, but to provide for those who can afford to wait an investment which will prove a sound one.



The *root* idea of Mr. Howard's book is to deal at once with the two vital questions of *over-crowding* in our towns and the *depopulation* of our rural districts, and to thereby reduce the congestion of population in the great towns, or at least arrest its progress.

The difficulties of dealing with the housing question in our overcrowded industrial centres become increasingly apparent with every fresh attempt at amendment. The expense is enormous, while improvement in one direction frequently increases the evil in another. The only satisfactory way out of the difficulty is to start afresh and establish a new town to which those manufacturers whose businesses admit of such removal may go. For this purpose the company have acquired a site within thirty-five miles of London, admirably adapted for the purpose of industrial and residential development. . . .

The company, however, do not propose to develop the estate upon the ordinary lines. The exceptional features of this scheme are that the town is to be limited to a population of about 30,000 inhabitants, that the greater proportion of the estate is to be retained for agricultural purposes, and that the dividends to shareholders are to be limited to a cumulative dividend of five per cent per annum. In the event of a winding-up, the shareholders would be entitled to no more than a return of their capital with a bonus not exceeding ten per cent plus any arrears of dividend. The advantages anticipated from this new departure in the development of a building estate are: Firstly, the provision of hygienic conditions of life for a considerable working population. Secondly, the stimulation of agriculture by bringing a market to the farmer's door. Thirdly, the relief of the tedium of agricultural life by accessibility to a large town. Fourthly, that the inhabitants will have the satisfaction of knowing that the increment of value of the land created by themselves will be devoted to their own benefit.

The control of the site of a town from its commencement obviously offers an unparalleled opportunity for the provision of open spaces and allotments while land is cheap, and also for the supply of power, light, and water on advantageous terms. . . .

In the face of physical degeneration, the existence of which in our great towns is incontrovertible, imperialism abroad and progress at home seem alike an empty mockery. Sound physical condition is surely the foundation of all human development, and the directors submit to the public a scheme for securing it in a particular instance which they believe to contain all the elements of success, and which, if carried to a successful issue, will lead to that redistribution of the people upon the land, in which, and in which alone, as they believe, is to be found a solution of the problem—How to maintain and increase industrial efficiency without impairing the national physique. . . .

#### §4

The first steps taken by the company were to get the estate surveyed for water and drainage and to prepare the town-plan. The managing directorship of Ebenezer Howard was not continued in the new company, for although he had no doubt succeeded with the pioneer work, he had also demonstrated his inability as a manager. He was addicted to the writing of lengthy reports on aspects of the undertaking that interested him, which his colleagues were not always disposed to read, and it was clear that the need for his full-time services was ended. Thomas Adams became secretary of the company and acted as manager, retiring from the secretaryship of the Garden City Association. The first stages of the work proceeded contemporaneously; for although the engineering schemes and the town-plan depended finally upon the contour survey, the study of the general conditions of the estate was sufficient for the preliminary outlines, so that the schemes were quickly finished following on the completion of the survey. An ample water supply was proved, and it was found possible to drain practically the whole of the central part of the estate by gravitation. H. H. Humphreys

prepared the contour plan, G. R. Strachan the water and drainage schemes, and Parker & Unwin the town-plan.

While this work was proceeding an office was opened on the estate, first in a cottage at Letchworth Corner, and afterwards in a new semi-permanent building near the new temporary railway station, to deal with inquiries and to accommodate the technical staff, and negotiations were opened with the railway company for the construction of a station and a service of trains. Rough platforms had been put up by the railway company for the use of visitors travelling by the special trains on the occasion of the formal opening in October 1903, and these became the first Letchworth railway station, used with much discomfort for some years. At that time there was no road access to the station site, in the centre of the estate, and the first business of the company was to make up an old farm track, now known as Spring Road, and construct a new road, Broadwater Avenue, to the new station. The railway company wanted the station to be in a slight cutting just west of Spring Road, with the goods yard on the down side north of the line and the factory area to the north-east of this site. This would have put the station almost on the western boundary of the estate, towards Hitchin, and would, of course, have altered the whole form of the town from what it is now. An interesting speculation may be indulged in (it would provide a capital paper for a town-planning examination) of how the town might have developed and what changes in the plan would have been required had this proposal been carried out. It would have been a practicable scheme, the chief disadvantage being that the town centre would have had to be some distance from the station, and the station would have lost the accessibility which its present central position gives it. On the whole, the projected site may be regarded as possessing more disadvantages than advantages, except perhaps from a merely railway point of view. This matter will be further discussed when we come to consider the town-plan. The railway company made the temporary station on the site first chosen for it, and a service of trains was given in 1905.

Development of the town, however, was started before the station was opened. There was a demand for houses and sites from people who had been interested in the garden city movement and had waited for the opportunity of living in such a town. The place attracted many people because of its novelty, and before very long it had acquired somehow or other the reputation of being a home for cranks. That reputation was never deserved. The people of the ancient town of Hitchin, which was proud at that date to be known as 'Sleepy Hollow,' looked upon the inhabitants of the new garden city with amazement, and scoffed at the idea of a neighbouring town being started that should become three times its size. The whole conception of a garden city was fantastic to them. The company had hardly a friend locally. The few original inhabitants of the estate almost without exception were antagonistic, excluding the labouring population, and the people in the country around regarded the affair as a joke. Fortunately, the tenant of the largest farm on the property, Herbert Hailey, who was also one of the most substantial farmers in the district, was well disposed and helped the company in every

way. He regarded what was being done with some amusement, and looked upon the officials as mad, but he was tolerant, good-natured, and ready to do anything he was asked to do. There can be no doubt that his assistance was of great practical advantage to the company.

The publicity that the scheme received drew the attention of London journalists, who came to see what queer thing was arising in Hertfordshire. The first houses to be built were the work of speculative builders, the grandfather of Bob Hope, the popular American radio comedian, being a member of the firm of builders, Picton & Hope, responsible for the first five houses. They were ordinary builders' houses and disappointing to those who were looking for something new in small house architecture. Soon, however, the characteristic Letchworth house, of a kind new to most people then, though familiar enough to every one to-day, with its red roofs and white rough-cast walls, green paint, and water butts, was seen and provided material for the comic papers. It is amusing to look back upon that time and to see how everything that was curious then is commonplace to-day. The evidences of crankiness at Letchworth were jounalistic inventions, with no real foundation.

All the same, the new town attracted people of independent minds. They were looking for something new. The town was new, the people intended to make a new community, and they were filled with enthusiasm. It seemed to some of them as though Morris's *News from Nowhere* was being realized, and that the hopes of man for a community free from the evils of the old cities were to be fulfilled. The people who came to Letchworth realized that they had been presented, as it were, with a clean sheet, and it was not strange that they desired to inscribe something worthy of their best intentions upon it.

They were not, however, social extremists, and though some of them were of the intelligentsia of the period likely to be found in communistic settlements, they were in the main ordinary people, who wanted, as far as they could get it, a free life; they were extraordinary only in taking some trouble to realize their wishes. A few were retired men and women who sought merely for a house and garden, but the majority were younger people who had jobs in London, and some were on the look-out for jobs in the town as they became available. There were, too, some architects, doctors, lawyers, and other professional men looking for a new field for practice. The atmosphere engendered was exciting and pleasant. However, the fact that so many of these people were discovered to be cranks by the press quickly scared the directors of the company, who had not thought about the kind of people likely to be attracted to their new town; they did not want their task, which was regarded as peculiar by all the people with whom they had to deal, and with some suspicion and doubt by all the authorities who were concerned with them, and on whom they depended, made more difficult by the behaviour of the inhabitants, and very soon whatever appeared to be out of the ordinary was discouraged by the company and its officials. So it happened, in a way not easily understood and disconcerting to most of the inhabitants of the new town, that anything



in the nature of adventurousness, experiment, and enterprise seemed to be at a discount. This was unexpected. Of course, the spirit of the people was not easily quenched, and in fact many new things were attempted even with the company's active support; but it must be confessed that there was disappointment, not to say actual conflict, at an early date. Something will be said on a later page about the management of the town and further comment will be reserved until that page is reached; but there can be no doubt that serious damage was done to the growth of the community in its youthful stages by failure on the part of the company to understand fully the significance of what it was doing.

### § 5

The official name of the town was settled at an early date. The directors of the company decided to appeal to the shareholders upon the matter as the people most interested, and a vote was taken which resulted in the name Letchworth (Garden City) being adopted. This was a sensible choice, for the major part of the town was in the parish of Letchworth, while the whole of that parish was comprised in the estate, and the addition of the words 'garden city' made the name descriptive of the scheme. The words in brackets are, however, now seldom used, no doubt because they made the name too long.

### § 6

The method adopted by the company in the development of the estate was to provide roads, water, drainage, and other public services, lay out the building plots, and lease them. The waterworks were started and the first mains laid in 1904, the sewerage system was put in hand at the same time, and the roads now known as Norton Way, Station Road, Ridge Road, Works Road, and Leys Avenue were constructed. The first building took place on the existing county road from Hitchin to Baldock, which ran through the estate parallel with the railway. Until the station was opened for traffic the people who had to travel to London used Hitchin station, and the garden city company ran a horse omnibus to connect with the trains.

The detailed site-planning was done by the company's officials in consultation with the architects. Houses were built by individuals for their own use, or as an investment, or by builders for sale. The company did no building, and, apart from workmen's cottages, provided no special facilities for building. A number of small builders was attracted to the town in the early stages of its development, who undertook contracts and when not otherwise engaged put up one or two houses at a time on their own account; but no financial encouragement was offered to speculative builders to embark on large schemes, not because there was any aversion to such encouragement but because the money was not available. An enterprising firm did indeed secure land for cheap bungalows, and did very well out of them, though there was a good deal of well-deserved criticism of its operations.



That building should start on the old roads and in the existing villages was partly a matter of necessity and partly a deliberate plan. The roads being there had to be used, and it was the architects' idea that building should begin away from the centre, leaving that part of the town to be done last. The result was to scatter the development, and this has been regarded as a mistake. It would have been more economical, it has been urged, to have developed south of the railway and not to have touched the northern area for some time. No doubt, had the company possessed the resources to carry out the building itself, this would have been done; but the resources were not there, and in fact the company did not want to do the building itself. What was desired was that the town should grow as far as possible in a natural rather than in an artificial or forced manner. I do not say that everybody concerned was agreed upon this, for the question did not arise and no such decision had to be taken, for there was never any prospect of anything else being done.

There can be no doubt that compactness in a development programme is desirable, but other factors have to be borne in mind. For instance, while it is possible to concentrate development when the building is all of one sort (and indeed under such circumstances no other course would be wise), when sites have to be found for small and large houses, cottages, factories, workshops, shops, and small holdings, the sites are bound to be scattered. In the opinion of the present writer it would have been impracticable to have concentrated development to the south of the railway, leaving the Norton area alone. Norton was too important a village to be isolated, and the road running through the estate for nearly two miles from Wilbury through Norton to Baldock, with its connections to Stotfold and Bedford, was too valuable to be left unused. It is extremely doubtful if, except for one or two outlying plots which involved undue outlay, it could be shown that any economy would have been effected by a different course of development from that actually followed by the company, though it is no doubt true that too many vacant plots were allowed to remain on developed roads.

The policy of building near the outskirts, working towards the centre, was undoubtedly right; for though it left the central area bare (much of it is still empty), it gave the opportunity for well-considered building there and a better class of building than the first small population could afford.

## § 7

A feature of Letchworth houses is that a large proportion is owned by the occupiers. Apart from housing schemes, it is estimated that four-fifths of the total are owner-occupied. About five hundred persons have availed themselves of the facilities provided by the district council for borrowing for the purchase of houses under the Small Dwellings Acquisition Act, but owing to the movement of population only about half of these houses are now owned by occupiers.

It can hardly be said that Letchworth is distinguished for its architecture. Apart

from the housing schemes there is hardly a road that has been treated as a unit, and town architecture depends not so much upon single buildings as upon wholeness in treatment, at least so far as roads are concerned, though the idea of unity has, indeed, to be carried further. Apart from Cowlshaw's 'Cloisters,' built for Miss A. M. Lawrence, a peculiar building intended for an open-air way of living, which was not carried out, Morley Horder's school and theatre, the other schools in the official style of architecture, the district council's offices, the churches, the library and the museum, and one or two of the factories, there is hardly anything in the town, if dwelling houses are also excluded, possessing architectural merit, and the merits of all but a few of the buildings mentioned are not high. All the shops and business premises are poor as architectural works, and so indeed are most of the factories, with few exceptions, among them the buildings originally erected in 1906 for W. H. Smith & Son under the supervision of Douglas Cockerell and Bernard J. Newdigate, the Spirella factory near the railway station, and one or two of the newer buildings.

The town centre is still unfinished, of course, but the shopping area in Leys Avenue has a picturesque higgledy-piggledy appearance, its pleasantness, so far as it can be said to have any, being due to the curve of the road and its gentle rise. One cannot deny that the appearance of the town on leaving the station is disconcerting. The station itself did no credit to the railway company; but when one emerges from the protection of the trees in the station approach, the town appears, if candour is called for, deplorable, without form or comeliness, and the first sight of Letchworth must be a disappointment to every discriminating visitor. It would be a disappointment, and more, to those who see it often, if they were in the habit of looking at what was before their eyes. Of course, the confusion of buildings which causes this disappointment was not intentional. It was the result of piecemeal building, each builder setting out to satisfy himself, subject to no accepted architectural standards, and failing to be brought into co-ordination by effective architectural supervision. More will be said on this subject when the town-plan is discussed; at the moment it is sufficient to say that there is much in the appearance of the town to give intense pleasure and that the initial shock wears off.

Its importance here is that we are at once provided with evidence of the town's natural growth. The garden city grew subject to whims and chance, almost as if nature were its originator, which was hardly in accord with the true spirit of the enterprise. It is the evidence, for one thing, that growth has been slow and difficult. People had to be attracted to the town who were able to make some contribution to its growth. They had to be ready to build or buy a house, to start a business and erect a shop, to build a factory and start an industry or remove it from an existing place. In the course of time, houses and even shops and factories were built by speculators or the company, but not at first. The activities of the speculator occurred only when it was reasonably safe to operate, which meant that the garden city had to have real existence and be more than a plan. And the company had no comprehensive building schemes and no means of executing them, and, anyhow, moved slowly.

It was how to effect the initial start to enable the undertaking to have any reality that presented the greatest difficulty of all. A few houses and shops and a few new roads were not enough. Yet for some years nothing but small steps seemed to be possible. There was much uncertainty among the board of directors, even fundamental disagreement, and it cannot be said that a constructive policy was arrived at. Had it not been for the chance offered by the Cheap Cottages Exhibition, progress would have been even more delayed than it was. This slow tempo was to some extent inevitable, because that is how all beginnings take place, but more particularly because the company was not in a position to build. Had the company been supplied with adequate initial capital, a different story might have been told.

Among the architects who have worked in the town are Raymond Unwin, Barry Parker, H. N. Baillie Scott, Charles Spooner, Halsey Ricardo, Geoffrey Lucas, C. Harrison Townsend, Allen Foxley, C. M. Crickmer, H. Clapham Lander, Bennett & Bidwell, C. H. Hignett, W. H. Cowlishaw, P. Morley Horder, L. H. Shattock, J. C. Tickle, R. B. Hall, L. Brown, C. S. Curtiss, and H. Bidwell.

### § 8

One of the most interesting domestic buildings is Sollershott Hall, originally known as Homesgarth. It was started by Ebenezer Howard in 1909 in an urge to provide a co-operative way of living. It consists of a group of houses and flats forming a quadrangle, with a common dining-room and service.

Another interesting scheme on somewhat similar lines, but without a large central organization, is Meadow Way Green, a group of co-operative houses built by the Howard Cottage Society Ltd. in 1915 and extended in 1924. The original scheme consisted of nine cottages and one flat forming a half-quadrangle, the second part consisting of six cottages and seven flats. Each cottage and flat has a living-room, scullery, bathroom and w.c., twelve cottages have two bedrooms, two have four, and the flats have two. The average net rent is 15s. 2d. per week, the gross rents (including rates) vary between 18s. 9d. and 29s. 11d. a week; originally the gross rents were 10s. 5d. There is a common dining-room and kitchen on each side of the green, the charge for which is included in the rents. There is a service charge amounting to 2s. 6d. per week per person. A midday meal only is provided co-operatively, the present cost being 1s. 2d. each person. The staff consists of a woman who comes in daily to cook and wash up, with the services of a charwoman one day a week. The administration is in the hands of a committee composed of the whole of the tenants, who themselves fix prices and exercise general control, each tenant in turn being responsible for the catering for a period of two weeks. The full committee meets monthly. There is no central heating, each cottage and flat having its own hot water system. The furnishing of the common dining-room and kitchen is provided by the Howard Cottage Society Ltd. and a charge of 15 per cent upon the outlay is included in the service charge.



The scheme is interesting because it has been maintained successfully in its original form for more than thirty years. It has certainly met a need. The fact that the unit is small has contributed to its success, and more schemes on similar lines ought to be put in hand.

### §9

Among the objects with which Letchworth was established, the primary one was to provide better living conditions for working people than could be found in the old cities. Therefore the cottages of the workers are properly one of the leading features of the town. Until after the first war these cottages were built by private enterprise, and Letchworth contained up to 1914 noteworthy examples of working-class houses of excellent types which were rented on an economic basis. Very soon after the scheme was started in 1904, the garden city company itself built a group of eight workmen's cottages for its own employees. These cottages cost just over £200 each, and were let at 5s. 6d. a week including rates. They were designed by a local architect and were pleasing in appearance; but though a great effort was made to build them cheaply, the cost was too high and it was clear that workers could not be housed in the town unless building costs could be reduced. Therefore the Cheap Cottages Exhibition, organized by J. St. Loe Strachey, the famous editor of the *Spectator*, in conjunction with the newspaper *Country Life*, came as something of a godsend. At this exhibition, which took place in 1905, experiments were made by architects, builders, and others in a large variety of materials and methods of construction—steel, concrete, wood, brick, and various patent substances. One hundred and twenty-one cottages were built in connection with the exhibition; the prize cottage was built of brick and tiled, and cost £150. Although the exhibition was concerned with the country cottage type of building rather than the housing of industrial workers, its object appealed to the company because of the need to discover a cheaper method of building than had hitherto existed if well-designed houses were to be built for workers at rents they could pay. The exhibition was certainly successful in showing that it was possible to build a good cottage cheaply, and it gave a powerful impetus to the better planning and the reduction of the cost of the small cottage throughout the whole country, and not least in Letchworth.

What had to be found were the means of building even the cheap cottage. It was a pressing problem. In 1905 the Heatly-Gresham Engineering Company Ltd. and the Garden City Press Ltd. had established the first industries in the town; these works were soon followed by other small factories and by some rather larger ones in the printing and bookbinding trades. These gave Letchworth its real start and established at a very early date its industrial character. With their advent the demand for workers' houses took on a serious aspect. An industrial and provident society—the Garden City Tenants Ltd.—had been formed to build some cottages on a co-partnership basis for the workers in the Garden City Press (a co-partnership printing enterprise); this society was



used to supply the demand for workers' houses generally, and became one of the first public utility housing societies in the country (though it did not retain its co-partnership basis); it built in the course of several years over 300 houses, all of them let to tenants at rents of 4s. 6d. to 16s. 6d. per week, exclusive of rates. The demand for workers' cottages was still not fully met, for many more of the cheaper dwellings were needed than the co-partnership was willing to build, and the garden city company itself promoted a company, called Letchworth Cottages and Buildings Ltd., for the purpose. The capital of this company was subject to a dividend of 4 per cent, guaranteed by the parent company, and was raised independently from people interested in good housing, including the directors themselves. It was able to borrow from the Public Works Loan Board, at 3½ per cent interest, one-half the cost of building for a period of thirty years, which in practice worked out at less than half the actual cost, because the Board always undervalued, to keep on the safe side!

This company's cottages were let at rents of from 4s. 3d. to 6s. 9d. per week, inclusive of rates. After the passing of the Housing Act of 1909, which enabled loans to be granted on special terms to public utility societies, other societies were formed to take advantage of these loans and to build the cottages for which there was a constant demand. Before the first war the average cost of a cottage at Letchworth containing living-room, scullery, and three bedrooms, including drainage, fencing, etc., complete (everything except the land), was a little over £150, and it was let at a rent including rates of 5s. 6d. per week. A cottage with a parlour was let at about 1s. per week more. Even at these rents the lowest paid labourer could not be housed, and as the garden city was intended for all classes of the community, the poor as well as the well-paid workman, there was a strong desire to build cottages that the very poorest labourer could afford to rent. The garden city company's subsidiary cottage company did what it could, but could not borrow money on such favourable terms as the local authority, so that the Hitchin Rural District Council, within whose area the garden city came, was induced experimentally to build four cottages at a total cost of £560 for the four, which were let at 4s. 6d. per week each, including rates, and showed a small balance in favour of the council. This was possible because the local authority could borrow the whole of the capital cost for a period up to sixty years; while a public utility society could borrow no more than two-thirds of the valuation of the cottages built (and valuation was invariably under cost) for a period not exceeding forty years. The rural district council afterwards built a further six small cottages, and later on a scheme of a hundred. This was at a time when house building by local authorities was something of a novelty, so that the rural district council's schemes showed much enterprise and some belief in the garden city.

There was much criticism of the design of these cheap dwellings and the accommodation offered, which was natural and right; but to do reasonably good building, to make the cottages look at least as well as middle-class houses, and to give them amenities both inside and out, all of which was aimed at, had to be reconciled with the fact that the

tenants could pay only small rents. It was a difficult task in a sphere where much if not all that was done was pioneering work. The directors of Letchworth Cottages and Buildings Ltd. had an independent survey of their cottages made by three people who had some reason to be regarded as experts, and their report contains remarks that are worth recalling at this late date, as they indicate the state of cottage building in 1911, and how far the country has progressed in housing since. The following were the criticisms made by the tenants of these cottages as summarized by the surveyors, reprinted from the present writer's book, *The Garden City* (1913):

*Living-room.* The largest rooms the most popular. More cupboards desired as a rule. Also shelves and kitchen dresser where absent. Objection to copper and bath in living-room.

*Scullery.* Size of smaller sculleries found very inconvenient, especially with large families. Concrete flooring disliked, bricks or tiles preferred.

*Copper.* Brick-set copper preferred to gas ones sometimes supplied, as helping to get rid of combustible refuse. Some complaints of steam rising to bedrooms.

*Bath.* Majority appreciate bath, but grudge space occupied in scullery. In two cottages visited with bath in lavatory tenants expressed great satisfaction with arrangement.

*Doors and window-frames.* Complaints in several instances of these being draughty and ill-fitting.

*Windows.* Top lights to open, especially in bedrooms, much appreciated.

*Larder.* Generally considered sufficient. Size of a few found inconveniently small. Complaint of dust where unceiled above. Sunny aspect much objected to.

*Parlour.* In a few instances considered too small. Great objection when used as passage room.

*W.C.* When immediately inside back door some tenants complain of publicity and aerial communication with interior of house. Others complain of publicity of outside door, but most tenants raised objection to both positions.

*Gas.* Seldom used in bedrooms.

*Coals.* Larger storage capacity frequently asked for, in order to buy more when cheap.

*Stairs.* No complaints, except want of handrail where absent.

*Bedrooms.* Great appreciation of the larger bedrooms. Several complaints made of size of smaller rooms and of difficulty in placing beds. In some cases objections raised to sloping walls as inconvenient for furniture. A desire for more cupboards frequently expressed. In a few instances complaints of rain coming into room through ventilators.

*Dampness.* Only one complaint, which is receiving attention.

*Outside shed.* Demand for shed strong and unanimous.

To place coppers and baths in living rooms was possible thirty-seven years ago, and the rarity of bathrooms is to be noted; the complaint about small bedrooms is still acute in the latest housing schemes.

The concentrated attention to cottage building which took place at Letchworth from 1905, until the first war made further building impossible, meant that the town was not only well equipped with cottages, but also that it knew how to get them, what they ought to cost, and how they should be planned. So that in 1919, when the Coalition Government's Housing Act was passed, the local authority was ready with its plans for building, and was one of the first public authorities in the country to have a housing scheme approved under the Addison scheme. The cottages then built at Letchworth were better planned, better built, larger, and in almost every way superior to the pre-war houses. That was because cost was at first a minor factor in the new municipal houses, while the pre-war houses were built with the closest economy; every pound was carefully

considered in connection with the latter, and all but bare essentials were rigorously cut out of them. Only on those terms could they have been built at all. Moreover, the cottage societies had to contend with a steady rise in the cost of building. Within the ten years before the first war there was something like a 15 per cent increase in building costs, due to the rising prices of building materials, so that the £150 cottage was approaching a cost of £170. This rising cost had to be met, which meant attention to economy in every direction. A man who gave much of his life to the study of economy in building healthy cottages in Letchworth was the late H. D. Pearsall; the results of his work will always remain in the town, and their influence will be felt wherever working-class housing is carried out.

The number of cottages built by the housing societies in Letchworth prior to the first war, when conditions were totally different from what they afterwards became, was:

Garden City Tenants Ltd.	.	.	.	.	305
Letchworth Cottages and Buildings Ltd.	.	.	.	.	193
Howard Cottage Society Ltd.	.	.	.	.	397
National Cottage Society Ltd.	.	.	.	.	65
Norton Cottage Society Ltd.	.	.	.	.	6
Letchworth Housing Society Ltd.	.	.	.	.	94
					<hr/>
					1,060

It is a matter for regret that the work done by these public utility housing societies, the experience they had gained, and the practice of economical working to which they were accustomed, were not utilized in connection with the national housing scheme after the war. There were housing societies elsewhere than in Letchworth doing valuable work; but unfortunately some societies (not in Letchworth) had been badly conducted and others were not in good repute. The Government did not take them seriously, and though provision was made for them in the Housing Act, 1919, the conditions of building in 1919 and 1920, and the more favourable financial assistance given to local authorities, made it impossible for them to operate. The majority of the societies formed throughout the country to undertake post-war building got into an unsound financial state. At Letchworth the societies were cautious; they knew that they could not build successfully on the terms offered to them, and none built until times improved. Some changes in the societies have taken place and the number of houses held by them at the time of writing (1947) is as follows:

Garden City Tenants Ltd.	.	.	.	.	339
Letchworth Cottages and Buildings Ltd.	.	.	.	.	194
Howard Cottage Society Ltd.	.	.	.	.	689
Letchworth Housing Society Ltd.	.	.	.	.	106
Arborn Estates Ltd.	.	.	.	.	274
					<hr/>
					1,602

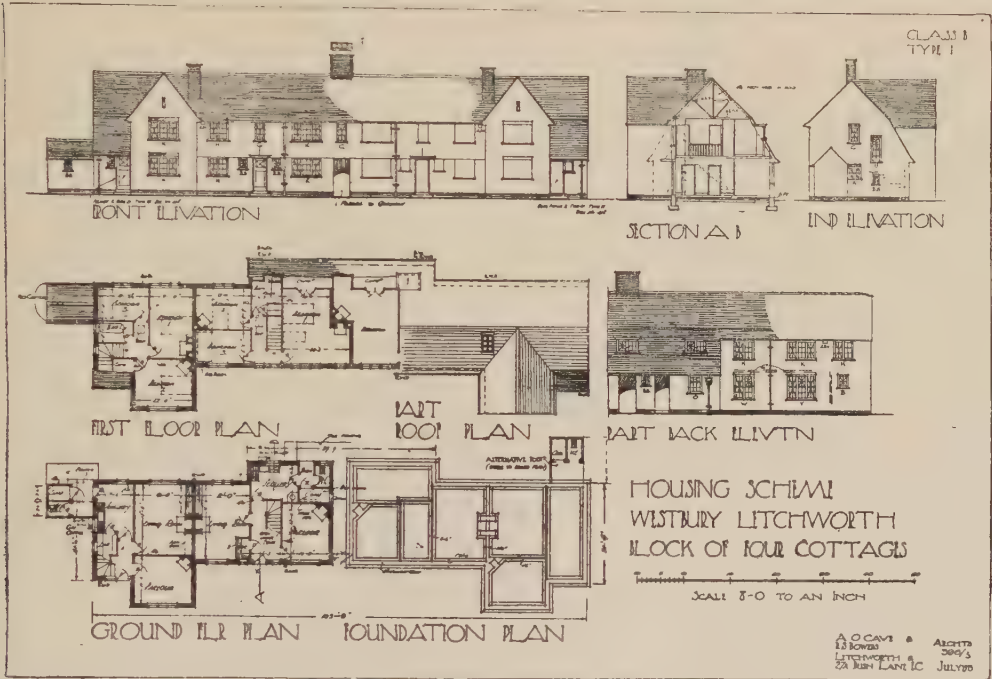
In addition, the garden city company has 103 cottages.

Before Letchworth started, the amount of attention given to cottage planning by architects had been slight. This was proved in the Cheap Cottages Exhibition of 1905,





Housing Act from 1919 to 1922 was 707, a further 48 were built under the Housing Act, 1923, and a further 476 under the Housing Act, 1924. The rents at which they were let were as follows: non-parlour, three bedroom cottage, from 7s. 3d. to 8s. 6d. per week; non-parlour, four-bedroom cottage, 8s. per week; parlour cottage with three bedrooms,



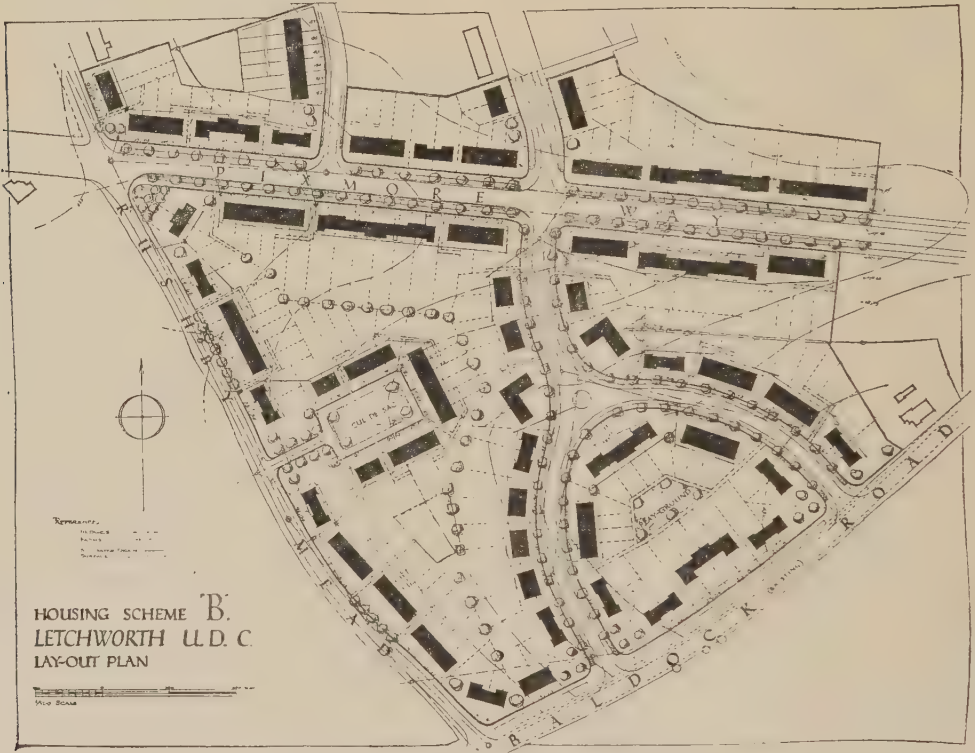
LETCHWORTH URBAN DISTRICT COUNCIL'S HOUSING SCHEME UNDER THE HOUSING ACT, 1919

*A. O. Cave and R. S. Bowers, Architects*

from 10s. to 12s. 6d. per week; parlour cottage with four bedrooms, from 11s. 9d. to 13s. 6d. per week. The rents rose by 3d. stages, and varied according to type, position, and size of garden; they were exclusive of rates. No two-bedroomed cottages were built. The present (1948) rents of these houses are respectively 9s. 3d., 12s. 3d., and 13s. 4d. a week. The council gave no subsidies to private builders under the 1923 Act, but made grants to one public utility society for building seven flats and six cottages, and to another for building twenty flats. The present position (1949) is that, as elsewhere, there is overcrowding; the council is ready to go ahead with building but receives no priority; it has been allocated and has put up 50 temporary houses and 160 'Duplex' flats of one and two bedrooms.

The management of workmen's cottages received a good deal of attention at Letchworth and deserves a word. The cottage societies do their own collection of rents and management. Some of them have combined their administration and employ their own workmen for small repairs, engaging contractors for large periodical redecorations.

Prizes of allowances from the rent are given for regular payment of rent, the good maintenance of the property, and the upkeep of the gardens. The urban district council manages its own cottages on very much the same lines as the cottage societies, but the repairs are done by jobbing builders.



LAY-OUT UNDER THE HOUSING ACT, 1919

*Crickmer & Foxley, Architects*

### § 10

The Letchworth estate was originally situated, as we have said, mainly in three parishes, Letchworth, Norton, and Willian. Practically the whole of the first two parishes was comprised within the estate, and about half of the parish of Willian was within it. Small portions of other parishes, Radwell, Great Wymondley, and Stotfold, were also included. The estate was within the county of Hertford, except for two very small areas in the county of Bedford. The local government of the area was in the hands of the three parish meetings of Letchworth, Norton, and Willian, and the Hitchin Rural District Council, on which each of the three parishes had one member. For some years, owing to the slow operation of the registration laws at that date, there were very few of the new inhabitants with any voting power, and the three parish meetings



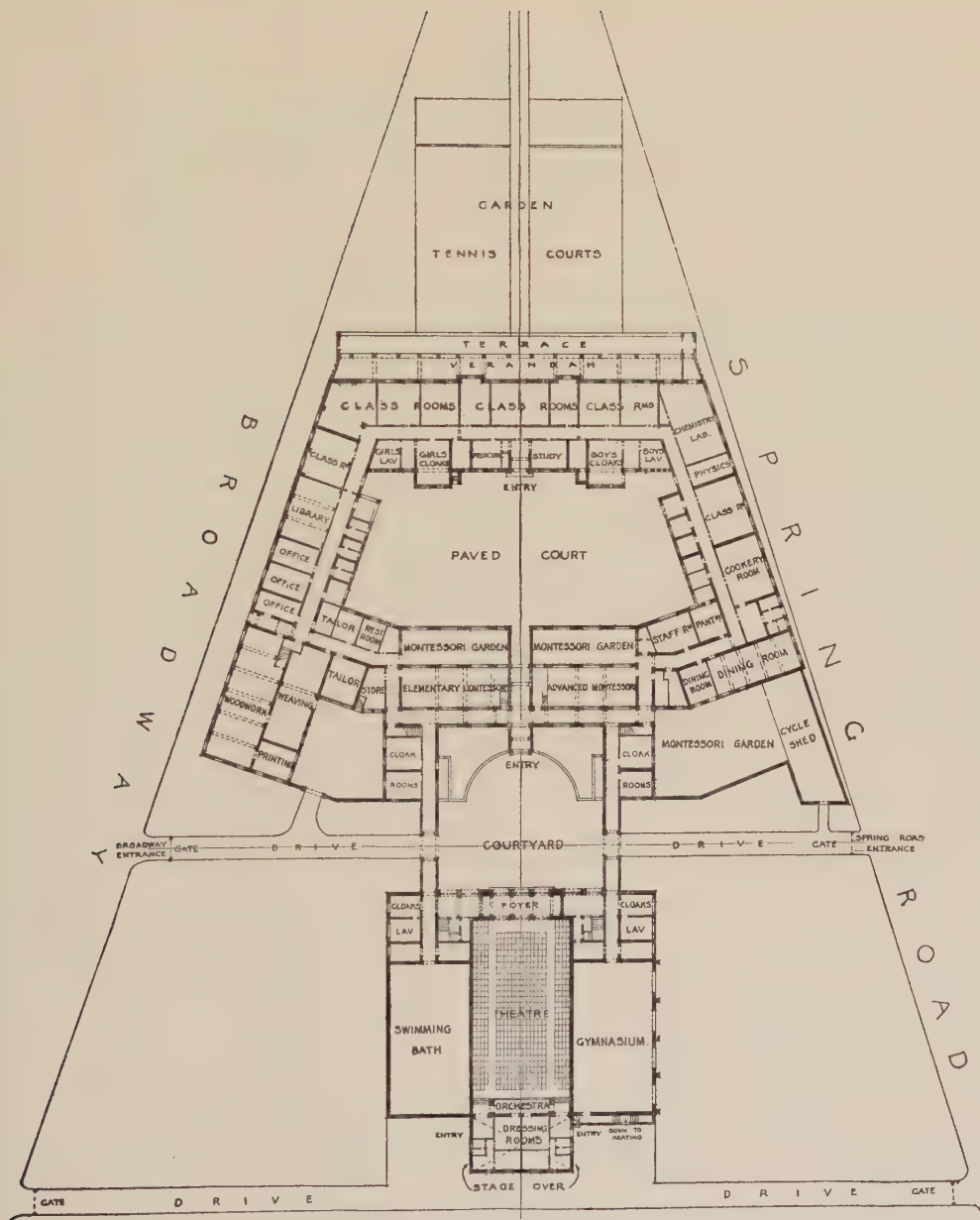
were not a practicable means of local government. A voluntary residents' council was thereupon created, which, with no real powers or duties, served as some means of organization for the new community. In 1907, on application being made to the county council, the Local Government Board issued an order under the Local Government Act, 1888, constituting a new civil parish of Letchworth comprising practically the whole of the garden city estate. The new parish had a parish council of fifteen members and the first council was elected in 1908, the late Rt. Hon. Sir John Gorst, who had come to live in the town on his retirement, being the first chairman. The number of representatives upon the rural district council was increased to four, and in 1909 to six. The powers of a parish council are very limited; its main duty was the lighting of the town, which was taken over from the garden city company; the council also adopted the Burial Acts and the Baths and Wash-houses Acts. The rural district council was still concerned with scavenging and refuse disposal and the passing of plans for building under its by-laws. Certain roads also were obligations of the district council, and these were ultimately made up and maintained by it. The development of the town threw a good deal of work upon the rural district council, none of the members of which, except the four local representatives, had any interest in the scheme. The district council and the parish council worked helpfully together, however. As time passed, discussion arose with regard to making the area an urban district, but neither the garden city company nor the parish council itself came quickly to the decision to take steps in that direction. The position of the town was peculiar, many of the duties of a local authority being discharged by the company, and it seemed that little would be gained by the creation of an urban authority at too early a stage, while a certain amount of additional expense would be thrown upon the town. The matter could not, however, be allowed to rest, for it was not reasonable that the government of the growing town should remain in the hands of an authority that had duties over a large rural area and took but a limited interest in Letchworth. It was, therefore, decided in 1917, with the consent of all parties concerned, to apply to the county council, under the Local Government Act, 1888, s. 57, for the conversion of the parish into an urban district and to separate it from the area of the rural district. The new urban district was thus formed in 1919 and the first urban district council was then elected. An urban district council has considerable powers, practically those of a borough council, and the council became therefore an important factor in the development of Letchworth. Its principal work has been the housing schemes, which it has carried out with remarkable success, the initiation and execution of the main sewage disposal works, main surface-water drainage, and the making up and taking over of many private roads; but it carried through many other projects, and from its inception has been actively co-operating in, if not predominantly influencing, the improvement and growth of the town. The council built its own offices on the Town Square in 1934.

Though elected under the party system, which is common to the country, the council has some independent members, which is also common in local government, and it has always been composed of men and women who take an active interest in the town as a

garden city, and its part in the future of the scheme is deserving of the study of all who are interested in local government. Ultimately the council may absorb the powers and position of the garden city company, and the New Towns Act, 1946, indicates how that might be done. The council kept in some sort of touch with the garden city company by means of a committee which until the war in 1939 met the board of directors of the company about four times a year. At these meetings any matters affecting the town were discussed. The chair was taken in turn by the chairman of the company and the chairman of the council, and the meetings were held alternately in the company's office and the council's chamber. No minute or other record of the meetings was made, the discussions were treated as private, and no decisions were regarded as binding upon either party. The meetings were found to work well and were said to have been of great advantage to the two bodies. Since the war these regular meetings have been abandoned, but they have now (1949) been resumed.

### § 11

Education in the new garden city received attention before even the site was known, and an education council had been appointed to prepare a scheme for the new town. The opportunity that the town afforded of doing something new in improving primary public education was one of which many people interested in the new community wished to take advantage. When the building of Letchworth started, the education council put forward a scheme for a non-provided school under the Education Act, to which all parents in the town were invited to send their children, and some part of the cost of which was to be voluntarily provided, either by the parents (to the extent that they could afford it), the town as a whole, or the interested public outside. A headmaster and staff were engaged and temporary buildings secured on rental from the garden city company. The school was, however, not a success, for the funds could not be secured for it, and the inhabitants, who were invited to contribute by means of a voluntary rate assessed on their property, would not support it. After a short time the county council erected a school building on land obtained from the garden city company, the staff was taken on by them, and the school transferred there. The education council did, however, succeed in inducing the county council to build a better type of school than they would otherwise have done, the company assisting by giving the site for the purpose. The school as extended had a capacity for 680 children, and is now classified as a secondary modern school. A second school for 700 children was erected in 1913, and a third school for 408 children in 1924. There are now (1949) another primary school, an infants and a junior school, a day continuation school, and a grammar school. The town also possesses two important private schools, St. Christopher, a co-educational boarding school, one of the leading schools of its kind in the country, made famous by its headmaster H. Lyn Harris, and St. Francis College, a Roman Catholic boarding and day school for girls up to university standard, with a preparatory school for boys.



ST. FRANCIS COLLEGE, AS ORIGINALLY DESIGNED (1922), WHEN IT WAS KNOWN AS ST. CHRISTOPHER SCHOOL  
*P. Morley Horder, Architect*



## § 12

What happened about a public library is worth recording. The parish council proposed to establish a library in 1912, but the proposal was defeated on a poll being taken on the score of the insufficiency of the ratable resources, but the Letchworth Book Club was organized as a private venture instead. This was founded primarily to enable the private libraries of the inhabitants to be made available, under certain conditions, for public use. A catalogue of all books which private owners were willing to allow other people to have the use of was kept, and by means of a system of voluntary collection the books required by readers were borrowed from the owners, delivered to borrowers at a central library, and afterwards returned to the owners. The organization of the book club was mainly the work of the late Dr. Gilbert-Smith, a lawyer and book lover, who, with a number of enthusiastic co-workers, soon had a catalogue of 6,000 volumes to offer readers in the town. The book club afterwards acquired premises of its own, with the nucleus of a public library, and its system of borrowing worked admirably. In 1927 the urban district council took an interest in the reference library that had been created, and in 1936 accepted responsibility for the work of the club; in 1938 the council built and opened a public library.

The Letchworth Museum had an earlier start than the library, having its nucleus formed as early as 1906 from finds of prehistoric implements and early British and Roman remains by the company's forester, F. J. Cole. Many people took an active interest in the subject, for the position of the garden city on an ancient highway, the Icknield Way, which ran through the town, and the evidences of Roman occupation of the site stimulated them. A site for a museum on the town square was given by the chairman of the garden city company, and a small legacy was devoted to the same cause, and, with other assistance, the first section of the museum was opened in October 1914. The building was completed in 1920, and in 1926 was taken over for the town by the urban district council.

## § 13

The first church building to be erected was the Free Church in Norton Way, which was built in 1906 largely by the labour of the congregation and was founded by members of all the nonconformist churches. The building was added to at various times and the new church was opened in 1924. The enthusiasm for religious unity of which this first new church was the outcome, was a notable expression of the spirit of the early residents; but as new people came to the town, looking for the satisfaction of their denominational interests, this unity departed, and the church entered the Congregational Union. A Friends' Meeting House was erected in 1907, and the Catholic Church of St. Hugh in 1908. There were existing village churches at Letchworth, Willian, and Norton, and the first

new Church of England was St. Michael's and All Angels' (1908). As the town is also in the parishes of Willian and Norton, new churches have been erected in these parishes: St. Paul's (1926) in Willian, and St. Thomas of Canterbury (1937) in Norton. There is a Wesleyan Methodist Church (1914), a Baptist Church (1935), and a number of other buildings are used for religious purposes.

#### § 14

The Howard Memorial Hall was the first public hall, and was built in 1906 by subscription, in memory of the first Mrs. Ebenezer Howard, who died in 1904 and was buried in Letchworth churchyard. Earlier, temporary buildings had been used for public gatherings. The Pixmore Hall (now used as a school) was opened in 1908. The first cinema was opened in 1910 and another was built in 1934. There are several other halls, and the now defunct Theosophical Trust built a theatre (opened 1925). There is a Conservative Club, and there was a non-political Letchworth Club (1910), also, later, a boys' club—both have disappeared. As early as 1910 the town had 113 societies for various purposes, among the most active being sports clubs, many of which had a vigorous life that has continued to the present day.

The golf club was started in 1905. And there are now over seventy tennis, cricket, hockey, football, and other clubs. The public recreation ground, under the control of the urban district council, consists of twelve acres; and there are a number of private sports grounds leased by the company to various clubs. Excluding sports clubs, youth societies, political organizations, and trade unions, there are now more than eighty societies, including five drama and six musical societies. In common with nearly all towns, Letchworth badly needs halls for public gatherings, plays, entertainments, and other purposes. Indeed, the town is now worse off in that respect than it was thirty years ago.

There is now relatively less social energy than in the early days. Why the social liveliness that was characteristic of the early inhabitants should have so greatly declined is not easy to say. Perhaps the fact that it was not encouraged by those responsible for the management of the company had something to do with it, a matter to which I have already referred. Another influence was no doubt that the novelty of living in the garden city wore off and new inhabitants arrived with little or none of the eager expectations that the first arrivals had. But the main cause was that the social life of the town had no centre. The Howard Hall was at first the only place of public resort and it was not designed for any other purpose than public meetings, for which it was in much demand; a small girls' club was afterwards attached to it, which had limited use. Later there was the Skittles Inn, and later still a club and institute on the co-partnership estate for the tenants and workmen belonging to that enterprise; the 'Skittles' still exists under another name, but the club and institute ended during the first war. Certainly

that war had a profound effect upon the life of the town, which, in fact, did not recover from the shock. New and interesting social efforts were made after the war, of which the most important was the Adult Educational Settlement; but many old ones came to an end, for the population changed.

Among the activities to which the war put a stop, never to be revived in their old form, though later restarted by the educational settlement, were those connected with the drama. The Letchworth Dramatic Society had been formed in 1906 by a few people who had some experience of the stage. The society started its career with original plays and very early performed Shakespeare, Goldsmith, Shaw, Galsworthy, Yeats, Browning, and other literary plays, staging them in an original way, giving a good deal of attention to production, and making its own scenery and costumes, so that the performances aroused a good deal of interest and attracted an audience even from London. Among its most popular efforts were three annual 'pantomimes,' which were satirical commentaries upon local affairs and personalities. This was one of the pioneer amateur companies of the country, presenting its plays for serious attention, not following the familiar paths of amateur theatricals, neither did it perform only for its own members, but appealed to the public. Its aim was the establishment of a Letchworth Theatre. Had it not been for the first war that aim might have been reached. Dramatic activity revived after the war, and took some new forms, aided by the existence of the school theatre already referred to, and the town has since become a centre for drama festivals. Attempts were made from time to time to establish a professional theatrical company, but without success, for there was no suitable accommodation.

The effect of the second war was no less deep upon the social life of the garden city than the first. Many evacuees from London crowded into the town in 1940, and some of the industrial firms with London offices moved them with their staffs to Letchworth, so that the town gained many new inhabitants. They had mostly to live under overcrowded conditions. The total result was to swamp the town's social life and to change it, and though the appearance of the town has not much altered, for it did not suffer war damage from bombing, yet like all other towns it is shabby, and no doubt its general spirit has altered considerably. What the future has in store is now awaited; it remains to be seen to what extent the town has the social energy to take advantage of new opportunities for social development; perhaps there may be achievements to justify and surpass what the original settlers had in mind for their new town, but there are no signs of them yet.

## § 15

The public health aspect of Letchworth has aroused much interest, and at one time the vital statistics were widely quoted. The writer took considerable trouble to investigate these figures, and came to the conclusion that the data were never sufficiently reliable to be depended upon. The only trustworthy figures are those that have been prepared



since the office of medical officer has been in existence, and these figures are given below:

	1919	1920	1921	1922	1931	1938	1944	1945
Population . . . . .	9,374	9,748	10,313	11,500	14,454	17,427	21,466	20,220
Births . . . . .	133	273	219	195	217	249	407	321
Birth rate per 1,000 pop. . . . .	14	28	21	17	15	14.2	19	15.8
Deaths . . . . .	52	69	77	97	105	144	206	173
Death rate per 1,000 pop. . . . .	5.5	7.1	7.5	8.4	7.2	8.9	9.6	8.5
Phthisis attack rate per 1,000 pop. . . . .	—	3.9	1.16	1.3	1.2	0.4	0.86	1.05
„ death „ „ „ „ . . . . .	—	1.3	1.4	0.52	0.4	0.4	0.28	0.25
Infant deaths . . . . .	12	12	12	8	9	10	18	6
Infant mortality per 1,000 births . . . . .	90	44	55	34.93	41.4	40	44.2	18.7

These figures justify the high reputation for health the town has always had; infant mortality is exceptionally low. In his report for 1944 the medical officer of health said:

It will be seen that the health of the town has been remarkably good during the period, despite the wartime difficulties. One might advance this as an argument in favour of the garden city ideal. It is perfectly true to state that a great many of the evacuees did undoubtedly return to their home towns in a better state of health, and this was in spite of a large number of cases where two or more families had to reside in a building planned to house one family.

One effect of the health reputation that Letchworth has always had has been its recognition as an industrial town in which a better chance is offered than anywhere else in England for those who have broken down in health to carry on their work. The place has therefore attracted a certain number of people from all over the country who have come to it for that reason. The townspeople established a well-equipped hospital on a site provided by the company.

## § 16

The licensing question has always been an acute one at Letchworth, as at the time the garden city was founded the drink question was a lively one, and some of the directors were interested in temperance reform. The first substantial promise of financial support for the company, which came from John P. Thomasson (part of whose fortune later went into starting the Liberal daily newspaper the *Tribune*), was made on condition:

That the inhabitants of the city have facilities for obtaining intoxicating liquors, but that the directors retain control of the traffic and not let it control them.

When the town was started the directors of the company decided to deal with the question of any new licences by means of local option. The company owned two existing licensed houses on the estate, just outside the town area, one on the south at Willian and the other on the north-east at Norton. These houses were leased by the directors to the People's Refreshment House Association, which has conducted them ever since with much success. As soon as the town began to get an industrial population the demand for a new licensed house in the centre of the town was formulated, and keen discussion arose. The Skittles Inn was built in 1907 as some attempt to meet this demand; it was a public-house in everything but the sale of alcoholic drinks, and has played a conspicuous part in Letchworth labour's social life; a description of it will be

given later; it did not, however, satisfy those who wanted a place in which to drink, and, in response to agitation, the company decided to take a vote on the question of a new licence in the summer of 1907. For this purpose adult suffrage was adopted, for it was a matter in which women were interested. A voting paper was issued to every adult householder, one for the husband and one for the wife, and to every lodger or other adult who had lived in the town for the previous six months. The voting papers were distributed to each person entitled to vote at his or her residence and called for after a few days. The question was 'Do you vote for the establishment of a public-house licensed for the sale of alcoholic liquors near the railway station?' The result was that 631 voted 'No' and 544 voted 'Yes,' a majority of 87 against. Polls were taken in succeeding years and the results of them all are set out below:

	1907	1908	1912	1920	1924	1939
Against a Licence . . .	631	834	1117	1665	2149	1880
For a Licence . . .	544	745	521	1600	1532	1435
Majorities against . . .	87	89	596	65	617	445

The vote taken in 1924 aroused, if possible, even more intense discussion than ever before. It was conducted by the urban district council on the local government register in the same manner as ordinary elections, the expenses being paid by the garden city company. Accompanying the notice of the poll was a memorandum by the directors:

At the request of First Garden City Limited, the Letchworth Urban District Council have agreed that a Poll on the question of the Licensed House in Letchworth shall be taken, and they have instructed their Clerk to act as Returning Officer.

If the result of this Poll be in favour of a Fully-licensed House in a central position in Letchworth, it is believed that premises could be obtained on the following lines, subject to the Licensing Bench.

The House would be of the best design possible, having a Hall, with small tables and provision for tea, coffee, and other refreshments, as well as alcoholic drinks.

There would be no Bar solely adapted for drinking.

Such a House should provide bedroom accommodation and a Restaurant or Coffee Room where meals could be served at popular prices; a Billiard Room, and also a garden for the provision of games, the whole forming a pleasant resort for both men and women.

Should a Fully-licensed House on these lines be erected, it is obvious that as this would involve a large sum of money it would not be possible for the Directors to re-submit the question of this licence to a Poll of the Inhabitants.

As it was contended that the question had been reopened without a definite local demand, the opponents of a new licence were stirred to great activity. They maintained that an unknown outside speculator was behind the proposal. The announcement issued by the committee stated their argument:

SOMEBODY wants you to present him with a gift of the value of the monopoly which will be created if he can get a licence for a public-house in Letchworth. He may be a local speculator, he may be a capitalist brewer . . . you have no credentials, no guarantees. Once you have said 'Yes' to this unknown, *you* will have no further opportunity of saying 'No,' even if he conducts his business in such a way as to be a disgrace to Letchworth. Are you prepared to forfeit your rights in this manner?

The discussion that took place on this occasion was evidence of the interest taken by the

inhabitants in the future of the town, and a deciding factor was the general feeling that the town had benefited by having no public-house in a central position. Another factor was the announcement that if the poll resulted in the establishment of a public-house, the company would not arrange for a further poll to be taken. The argument that the town was likely to benefit as a shopping centre by the opening of a public-house was not used on this occasion to any extent. Calculations were made as to the amount of money actually spent by the inhabitants on drink, and it was estimated that it did not exceed £20,000 a year; the amount spent by the same population based on the average expenditure on drink per head in the country as a whole would have been £90,000.

A sixth poll was taken in 1939 by the urban district council in the same manner as the previous one. Only 3,320 electors troubled to vote out of a total number on the register of 11,262, which was 29 per cent. The question put to them on which they voted was, 'Do you object to an additional licence being established in Letchworth?' The number voting in the affirmative was 1,880.

Of course the existence of the two inns at Willian and Norton made it impossible to say that Letchworth was 'a town without a pub.' Those who wanted a drink and the society of the public-house had to take a walk for their pleasures, that was all. Two of the directors of the company who were interested in temperance, Aneurin Williams and Edward Cadbury, thought, when the matter was first discussed, that a negative attitude was not sufficient, and, being men of means as well as conscientious in their opinions and sense of public duty, went to the expense of building and running the Skittles Inn, which became famous. As a social institution this place was an undoubted success, though it never paid its owners in any other way. Its success was no doubt due to its manager, a cockney named W. G. Furmston, one of the earliest residents of the garden city, who came to live in one of the first new houses and afterwards built a house and took a couple of acres of land as a small holding, while still keeping his job as a woodworker at Doulton's works on the Albert Embankment. Greatly desiring to work in the garden city, he was enterprising enough to apply for the job of manager of the new Skittles Inn, and the owners and the garden city were fortunate enough to get him. 'Old Bill' Furmston, the host of the 'Skittles,' thus became an institution; no one can measure the part he has played in the life of the town.

The Skittles Inn was designed by Parker & Unwin in the domestic style of architecture that these architects popularized: a wide expanse of red-tiled roof, white roughcast walls, green paint, and ingle-nooks. It was hidden away on a site in Nevells Road, and upon a road that ran through a 'cattle creep' under the railway line, used for many years as the main means of communication between the north and south of the town. The site was a handy one in the early years, and the 'Skittles' was much used, for the place was a great boon. The building consisted of a bar, a large billiard-room, a reading-room, and a covered shed for games. There was a large decorated signpost and a water trough outside. At first skittles was actually played, but the game never took on, and the skittle-alley was converted to other purposes, and proved very useful as a meeting



place. The 'Skittles' became the centre for trade union branch meetings. It was conducted as an open house, people being encouraged to spend their time there reading the representative selection of newspapers and magazines that were available, playing games, etc. A cup of tea or coffee or some other drink, with food too, if required, was sufficient for an evening's chat and smoke. The takings, therefore, were small, which explains why the house did not pay. This lack of economic return was never reflected in the manner in which the house was conducted, however. The genial host and his wife maintained a friendly atmosphere, which was never lost, and it performed in every sense but one the function of a real 'local.' Nearly every one who visited the town gravitated to the 'Skittles,' and Old Bill was a centre of information upon every local subject. No advertisements of tobacco, beverages, or sweets were exhibited in the place, which was kept as homely as possible. When the 'cattle creep' ceased to be used after the building of the Norton Way railway bridge, the 'Skittles' fell out of the way of traffic and became much too secluded. In 1924, therefore, Barry Parker designed a new building to be put up at the junction of Leys Avenue and Norton Way, but the scheme was unfortunately turned down in favour of a large building that had been put up as furniture showrooms in Station Road, and there the People's House was opened, with Bill Furmston still as its manager. The building was not built for such a purpose, and it had none of the homely atmosphere nor the picturesqueness of the original Skittles Inn. In fact it was gaunt and ugly, though it had ample space on three floors; but although it did much more business and put itself on a paying basis, it did not take the place of the 'Skittles.' Soon after the start of the second war the Ministry of Labour took over almost the entire building for a hostel, and it has since passed through the hands of several government departments. This was a serious social loss to the town. Part of it still operates as a 'pub without beer,' on the old lines, with Old Bill still the host. No one who visits Letchworth after years of absence fails to call in to see him.

That the town provides a first-class opportunity for public-house business was not lost on those interested, and, though it is not possible to get a site without the company's consent, a piece of land was bought outside the town at Wilbury Hill in 1939, on the main road between Hitchin and Stotfold, and an application for a licence in a new building to be erected was submitted to the Biggleswade licensing magistrates, who granted the application, despite the garden city company's opposition, so that a new public-house called the Wilbury Hotel now serves the neighbourhood though not in the town. The action by the magistrates indicates that the continued refusal to allocate a site for new licensed premises in the town was not liked, rather than that the site to which they granted the licence was a suitable one. In fact it was not at all suitable.

There are two registered clubs where the sale of intoxicants is permitted—the Conservative Club and the Letchworth Golf Club. Letchworth Hall Hotel in the agricultural belt has a meals' licence.

## § 17

The garden city had a newspaper before a brick was laid, for a new printing enterprise intended to be carried on in the town was formed by a number of printers under the influence of the ideas of labour co-partnership with which one of the leading directors of the company, Aneurin Williams (soon to be its chairman), was associated. This group established itself at Hitchin and started work there until a printing shop could be erected in the new town. The Garden City Press, as the group called itself, immediately issued a weekly news-sheet, which it named the *Garden City Press*. The idea was to announce both itself and the garden city. The paper lasted a year, but its issue ceased when the printers moved to their factory at Letchworth late in 1905.

Of course, the new town was 'covered' by the existing local press represented by an old-established weekly, the *Hertfordshire Express*, printed in Hitchin, but the garden city wanted its own paper. The demand was responded to in August 1906 by the publication of the *Letchworth Magazine*, a penny monthly, which ran for some time, but more was needed, and in the following month, the *Citizen* was started as a weekly newspaper by some of the compositors who had been members of the original printing group; it was printed on a small plant erected in a bedroom. There had been a serious split in the co-partnership concern soon after it came to its new workshop, and several of its members had left intending to start a new printing undertaking. The *Letchworth Magazine* was printed on the same press, and its success had inspired the printers to venture further. They were justified, for a new business was built up, and the weekly newspaper, whose early years were somewhat lean, became an important and valuable organ. The editor, after the first few issues, A. W. Brunt, afterwards wrote an interesting personal account of the history of the town, *Pageant of Letchworth* (Letchworth, 1942), in which he tells how, as editor, he received the compositor's wages of 32s. to 34s. a week, a position he held, however, for six years. As journalist and public man, he lived to be recognized as one of the town's esteemed fathers until he died in 1946.

Another publication, a monthly called the *City*, provided evidence in 1909 of the desire for means of expression that existed. This was a somewhat ambitious affair, edited by Henry Bryan Binns, a poet and historian, and the magazine displayed the literary talent that the young town possessed; it lasted only a year or two, but had a useful life.

The functions that a newspaper plays in the social life of a town were well brought out at Letchworth, and may be followed in the history of the *Citizen*. What is wanted in a newspaper is first an organ of information; for people ask what is going on and what is to take place, and organizers of social activities want publicity for their efforts. In the second place, an organ of criticism is needed. Critics arrive with the first breath that is drawn on the town's vacant site, and, for the sake of social health and well-being, that

criticism demands expression. Unless criticism can be uttered freely and given circulation there soon exist suppressed difficulties and deeply felt objections that can become unhealthy and hard to remove. Of course, most of the criticism is misinformed, unjustified, and perhaps merely carping, and some may even be malicious, but nevertheless it ought to be expressed. This is painful for those who are responsible for the undertaking, and sometimes hard to bear; but it has to be suffered, because it is necessary to know what people say, however unreasonable it may be, and to have a means of answering it. A new town is a community, and a community lives by the dialectic of its members, that is to say by the discussion of differences; if the press has a function apart from being a mere record of events, it must be to provide a means for that dialectic. The ideal newspaper is independent, unbiased, tolerant, and provides a means of expression for all opinions, good or bad, and it reports events without discrimination of persons. But the ideal newspaper exists only in the imagination.

### § 18

The growth of the first garden city has had nothing dramatic about it. A steady process of building and factory development proceeded until the war in 1914. Then came the changes that the war everywhere produced; the industrial organization of the town expanded and under the influence of war demands partly changed. New factories were erected, and though the town was not made a centre for any of the large national factories, the rapidity with which it became adapted to the national needs was remarkable, probably because its industries and resources were very modern. When the first war started the existence of the town did not seem to be known to the military authorities until its site was chosen for training purposes, and the troops arrived to find a town on what was thought to be a vacant spot. Most important of all, the town became a home of Belgian refugees, and from soon after the outbreak of war until after the armistice in 1918 the town had a population of 3,000 Belgians. A large number of the Belgians were skilled men working in the engineering shops on munitions of war and drawing good pay, which they spent freely. The town prospered as a result. At the end of the war they returned home. There was little building. When the war ended the town showed evidence of real stability and every sign of possessing the will for continued growth.

In the interval between the wars the town grew. It continued to exhibit no spectacular signs of development and no original features. In fact it began to show the unassuming characteristics of ordinary English country towns that depend upon nature and chance. There was little or no fresh enterprise, but the financial position was consolidated, as we shall tell in the proper place, and the garden city company took its place as a sound and well-established land company. During the second war, as we have said, the town played its part, but gained no fame beyond that which



was deserved by all the towns of England not knocked to bits by the enemy. Now the first garden city remains to be completed. The story of its growth is told in the following table:

<i>Year</i>	<i>Number of New Buildings<sup>1</sup></i>	<i>Estimated Expenditure<sup>2</sup> on New Buildings £</i>	<i>Population<sup>3</sup></i>
1903	—	—	400
1904	36	12,000	450
1905	280	90,000	1,500
1906	507	237,500	2,500
1907	970	314,000	4,300
1908	1,104	340,275	5,250
1909	1,206	365,300	5,700
1910	1,334	404,500	6,500
1911	1,564	462,700	7,300
1912	1,761	517,705	7,912
1913	1,880	577,705	8,500
1914	1,984	614,015	9,000
1915	2,160	666,361	11,500
1916	2,296	723,000	12,500
1917	2,296	723,000	12,500
1918	2,298	724,200	12,500
1919	2,345	771,200	10,000
1920	2,715	1,141,200	10,200
1921	3,070	1,496,200	10,500
1922	3,138	1,550,600	11,500
1923	3,219	1,625,400	12,500
1924	3,349	1,729,400	13,500
1925	3,459	There is no reliable information for these years, but a rough estimate of the expenditure on new buildings is 3½ to 4 million pounds up to 1939.	13,014
1926	3,634		13,316
1927	3,752		13,688
1928	3,779		14,080
1929	3,931		14,476
1930	4,019		14,920
1931	4,089		14,808
1932	4,171		14,899
1933	4,223		15,215
1934	4,330		15,409
1935	4,443		16,109
1936	4,628		16,894
1937	4,700		16,868
1938	5,241		17,993
1939	5,282		18,223

The estimated population during the war and since is as follows:

1940	17,620	1944	23,030
1941	20,290	1945	19,970
1942	22,380	1946	19,687
1943	21,510	1947	20,027

<sup>1</sup> Including buildings in course of erection.

<sup>2</sup> Estimated by the company up to 1915, from 1915 by the writer.

<sup>3</sup> Estimated by the company.

The fluctuations of the wartime population were due to reception of evacuated persons, to the direction of workers to the town, and to the movement of such people in and out. The increase of population depends upon the buildings of new houses and factories.

### § 19

That Letchworth should have grown so slowly has puzzled many observers. Why, it is asked, if the garden city had the merits that were claimed for it, did it not grow systematically and complete itself within a reasonable time? The answer is that its builders were not magicians but colonizers without support. They had no magic wand. In short, they had insufficient capital. This not being recognized, the slowness of the garden city's growth and its delayed completion have caused writers who profess to be scientific to condemn it, which shows restricted observation and imperfect measurement, to say nothing of weak judgment. The London County Council can build a Becontree in less than two decades; but Letchworth that provides for not much more than a third of Becontree's population is only barely more than half completed after more than four decades. Though the differences between the two schemes are not, it seems, obvious to some writers, they are none the less profound and by no means obscure.

Becontree was a mere housing estate built with Government support and subsidies and with the resources of the greatest municipal authority in the world; no attempt was made in it to face the problems of town building and community life, with the result that every one agrees that Becontree is a model of what to avoid. Letchworth on the contrary was not a housing estate, but included housing estates, its promoters had no Government support or subsidy and no resources but their own private means, and they did attempt to handle at least some of the fundamental problems of town development of industry, commerce, and community life, and also the problems of agriculture in relation to the town. They did in fact seek to search into the constructive aspects of town growth, especially into the economic aspects of the development of urban land, and to make a contribution to problems that, except by them, were entirely neglected. The promoters of Letchworth had before them the whole problem of decentralization in relation to the great city and all that an attempt at a solution of that problem implied. Furthermore, when we consider that Letchworth was started in 1903, without anything preceding it that could guide the promoters, except the manufacturers' industrial villages, and that Becontree dated from 1919 when a certain amount of research at least in housing had taken place, and when the experience of Letchworth was available, to compare the garden city with the housing scheme is absurd. There is no comparison. Neither is there any comparison between the social life of the two places, for the one, though with shortcomings, is rich and fruitful, on a level that has hardly been excelled anywhere in modern England, while the other has nothing worth calling social life at all.

## § 20

From the start, Letchworth has been noted for its social life. The pleasant friendly atmosphere that existed among the first inhabitants, which made the experience of those who were fortunate enough to take a part in the founding of the town so unforgettable, has not entirely been lost, and the town to-day has homely qualities, a vivacity of sentiment in its population and a welcoming air that is very unusual. The old towns have their traditions and their memories; the new suburbs have nothing upon which a sense of community can centre; but the garden city, built for a purpose, influenced by an ideal, has a spirit of spontaneous fellowship which makes for social life. That social activity expresses itself in the societies and clubs formed for study, recreation, sport, and everything else. It is found also in the churches that are founded, in the schools that are set up, and throughout the daily lives of the people. Its tendency is to lessen class and other distinctions between people and to bring about a community of interest which is splendid material for building up the city. In Letchworth the particular quality of this spirit owed a great deal to the novelty of the scheme, so that it is not likely to be manifested precisely in the same degree elsewhere. But the essential virtues of it may be considered to belong to an attempt to make a new town, which always and everywhere, no matter how often repeated, is likely to fascinate and inspire those who engage in it.



## CHAPTER II

### ITS TOWN-PLAN

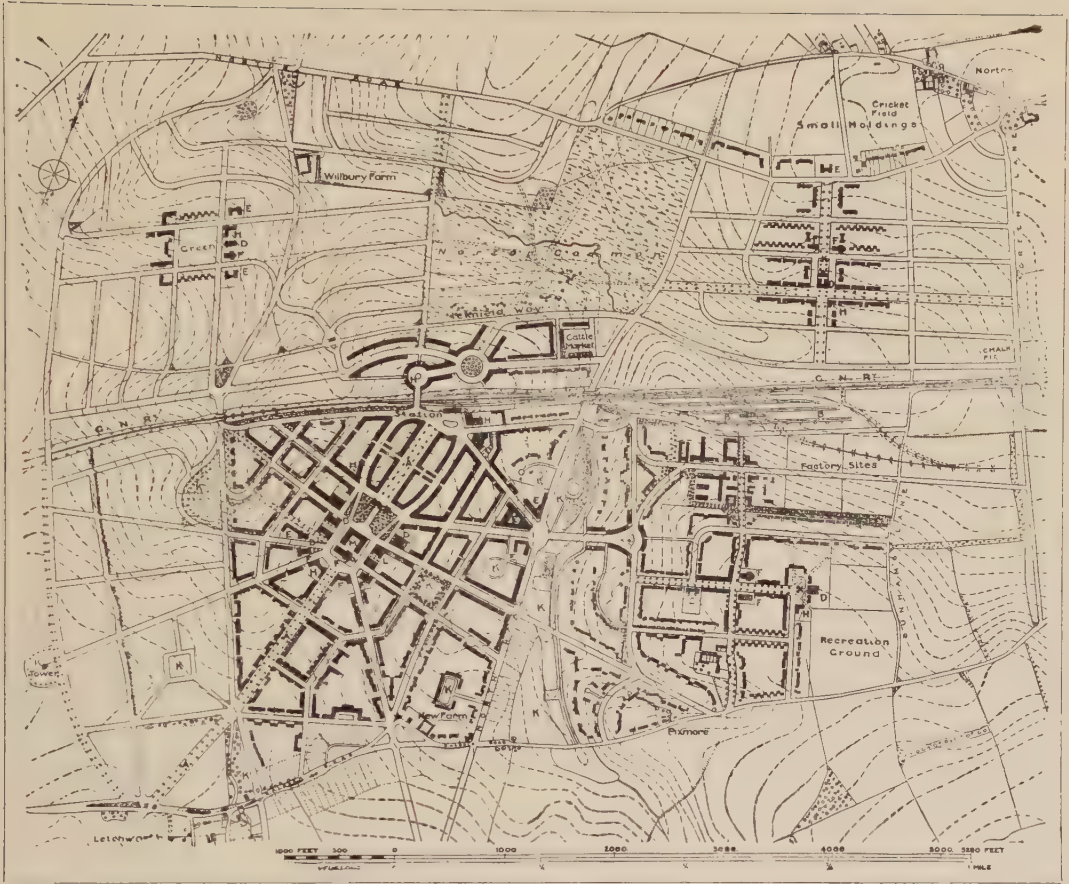
People will say that the growth of your garden city is arbitrary and artificial, that it is not growing as historical things do grow. . . . I would urge you to reply when dealing with that by insisting that everything connected with humanity is artificial, and that the garden city is the result of practical causes.—G. K. CHESTERTON (1905)

#### § 1

THE town-plan of Letchworth was prepared before the existing town-planning movement in England had started. T. C. Horsfall had written on the example of Germany in town-planning, though he did not once use the term in his long report, already referred to, and a number of other people had written on the subject, among them Ebenezer Howard himself in his own book. But there was no interest in it among architects or engineers or anybody else until after the development of Letchworth. Undoubtedly the garden city scheme played a large part in directing attention to town-planning throughout the country, and even abroad, by providing a striking example of a plan for a complete town. The Letchworth town-plan, therefore, will always have special significance as the first attempt on any considerable scale to express twentieth-century town-planning practice and ideas.

The architectural firm of Parker & Unwin (then of Buxton) and the well-known architects Halsey Ricardo and Prof. W. R. Lethaby were instructed by the company to prepare sketch-plans of the proposed town; the general scheme of Parker & Unwin was adopted, and they were commissioned to prepare the town-plan. Raymond Unwin came to his task well versed in the sociological aspect of housing. He had therefore, a humanistic view of the duty of the architect, and of the obligation of the community to see that its members live under decent conditions. Those leading ideas are clearly shown in the plan for the new town that he prepared with his partner Barry Parker.

Raymond Unwin, who was born in 1863 and died while on a visit to America in 1940, proved himself to be a man of more than ordinary abilities. He had unusual energy and considerable initiative, and acted always with a sense of public duty. His architectural influence has to be looked for in the small cottage, and particularly in the lay-out of small cottages. As a town-planner, he made the first plan for Letchworth, and afterwards designed Hampstead Garden Suburb (1907) and the wartime village of Gretna (1915). His fame came largely from his writings and lectures. He was a capable writer, and a well-liked and experienced lecturer. He was much influenced by the ideas of William Morris, as can be gathered from his style of writing and the get-up of his books. Unwin had already, prior to the first garden city, written a book on the



PARKER & UNWIN'S ORIGINAL PLAN OF LEITCHWORTH GARDEN CITY  
AS FIRST PUBLISHED (APRIL 1904)

*Key to Plan*

- |  |                                |                                  |
|--|--------------------------------|----------------------------------|
| A. Main avenue                         | E. Sites for schools           | K. Open spaces, greens, or parks |
| B. Goods yard and sidings              | F. Sites for places of worship | L. Site for post office          |
| C. Central square                      | H. Sites for hotels            | M. Site for municipal buildings  |
| D. Sites for public hall, museum, etc. |                                |                                  |

lay-out of building estates in association with Barry Parker, *The Art of Building a Home* (1901), which contained a contribution on 'Building and Natural Beauty' in which he complained that the growth of the modern town desecrates the country. He said:

... if we look for it, we shall find that urban suburbs specially offend in coming between the town and the country; so that, however the city may be fitted to beautify the landscape, we cannot see it from the fields; nor can we catch a refreshing glimpse of the cool green hillside from amidst our busy streets. For between lie miles of jerry cottages built in rows, or acres of ill-assorted villas, each set in a scrap of so-called landscape garden.

No doubt the effect of Ebenezer Howard's propaganda for the garden city is to be seen in these words, but they have a feeling of their own. The same book contains a chapter on 'Co-operation in Building,' in which Unwin contrasted a building estate with the land cut up into little plots all about the same size, the plots sold to a chance collection of people who erect houses of any style or lack of style, regardless of each other, every building blocking the view from some other, there being 'no grouping of buildings and organized arrangement,' with a village that was 'the expression of a small corporate life in which all the different units were personally in touch with each other.' It was, he declared,

. . . this crystallization of the elements of the village in accordance with a definitely organized life of mutual relations, respect, or service, which gives the appearance of being an organic whole, the home of a community, to what would otherwise be a mere conglomeration of buildings.

In this paragraph the indications of Unwin's own future contributions to town-planning are to be seen and the qualities that made them effective. He went on in the book to discuss what people want who are dissatisfied with existing towns and suburbs, and said:

What they really want are country villages, little centres of life large enough and varied enough to give them interesting human society and a few of the more necessary comforts of modern life, such as a post office, a railway station, efficient drainage and water supply.

Unwin proposed, therefore, that such people should purchase an estate within easy reach of a town and develop it on co-operative lines, grouping the houses, giving each a sunny aspect, and reserving portions of the land from being built up so as to preserve an open outlook and views. He discussed the lay-out of the site so as to avoid 'mere rows on the one hand and detached villas on the other.' Local building materials, he said, should be used, and a 'controlling influence' be brought into existence, so that 'the introduction of discordant colours or style of building be prevented,' and went on:

Probably this general control could be best secured by giving to some architect in full sympathy with the scheme powers similar to those usually possessed by the agent of a large ground landlord. . . .

Unwin further proposed that these settlements should utilize the practical advantages of co-operation by using the land not required for building for the planting of fruit trees, for a dairy farm, and for recreation purposes. A laundry, a 'co-operative conveyance,' and education for the young could be other enterprises. Such schemes might, he concluded, be carried out by a landowner, or,

. . . the state or municipal landlord might relieve the overcrowding in towns by developing hamlets and villages in the outlying district wherever they had, or could get, suitable land.

There can be no question that here we find Unwin at this early date applying ideas gathered from Ebenezer Howard's garden city project to a situation that was much easier to visualize and to discuss than that presented by a new town. His mind was upon the small community, the village or suburb, rather than upon the town. It was from such applications that the garden suburb movement arose that did so much to divert attention from the fundamental elements in the garden city. Unwin never really moved from the point of view and the ideas contained here.



The extended reference in this place to Unwin's early writing is justified by the fact that when he came to plan the first garden city he unmistakably had those ideas in mind. It would not be unfair shortly to describe the Letchworth plan as a group of connected villages around a civic centre, with a factory district on the outskirts. The planning of the north-east and north-west sections of the town indicates the idea of local community life; while throughout the plan there may be distinguished a series of minor centres which show that this idea was a predominant factor in the conception of the plan.

In fact, we get in Unwin's plan the first practical indication of what is now called a 'neighbourhood unit.' This, as we have suggested earlier, was Ebenezer Howard's idea of self-contained wards. The neighbourhood unit, called by that name in the United States, was put forward by the sociological writer Mary Parker Follett, for enabling democracy to function in cities; it was taken over in town-planning and worked out in connection with the survey of New York City made between 1928 and 1931 (an undertaking in which Thomas Adams had a leading part, though he had nothing to do with the neighbourhood unit idea), and in due course arrived in this country and was adopted in the County of London Plan (1944), and by the Government architects for post-war housing. Thus do ideas travel. The seed is sown in one spot, but, lying dormant, is carried abroad to germinate, and fresh seed is brought back to its starting place. Howard's idea did not wholly lie dormant; for it brought forth fruit in Unwin's mind, though hardly of the strain belonging to the original conception; but in the Letchworth plan, Unwin gave expression to Howard's proposal, modified by the site and his own predilections.

## § 2

An account of the site has been given in the preceding chapter. The shape of the estate was something like that of a pear, and the whole of the property within the boundaries (with exceptions that were negligible) had been purchased. The town-planners therefore had a free hand, subject only to the physical conditions of the site and the requirements of the company. The first matter that had to be considered was the fact that the railway running through the centre of the estate cut it into halves. This created a physical separation between the two parts of the estate which could not be ignored, and at once, whatever the other conditions were, made it impossible to prepare an ideal town-plan.

The effect of a line of railway upon a plan is of primary structural importance. Theoretically perhaps it would be ideal if the railway were to enter a town and after arriving at the most convenient point for traffic purposes pass out again by the same route—that is, make the town a terminus. But practically all towns must have a railway either running through them or on their peripheries. In the first instance the town is given the advantage of transport facilities at or near its centre where the largest area can be served; while in the other the cutting of the town into parts is avoided, but there is the

disadvantage of a railway station at a distance from the greater part of the population. Moreover, in the latter instance, the land on the further side of the railway would need to be owned or controlled by the town to prevent advantage being taken of the proximity of the station to develop it, and so as to make certain that the station, after all, should not become the centre of development. On the whole, it is probably better for a railway to run through a town as near to the centre as possible; but the division of the land so created should be worked into the town-plan and made some use of, separating for example the industrial and residential areas.

The other physical features of the site were the slight valley running through the middle of it from south-east to north-west, which suggested the line of the main drainage system; the level land necessary for factory sites, which lay somewhat to the east of the estate; the existing main roads, which were few: the Hitchin to Cambridge road, which ran west to east parallel with the railway but at a distance of three-quarters of a mile, and the road through Norton on the north at about the same distance from the railway, and also running roughly parallel with it; and the position of woodlands such as Norton Common.

### § 3

The requirements of the company were that provision had to be made for a population of from 30,000 to 35,000 persons, with factory sites and areas for houses and cottages, and that an agricultural belt around the town was to be preserved. The estate lent itself to the meeting of these requirements. The central part of the town was placed on a large field to the south of the railway, constituting a plateau sloping slightly towards the north. The main road of the town, Broadway, was made to run north from the Hitchin road to the site selected for the railway station, a distance of about one mile. On the Broadway, in the centre of a bare but almost level piece of land, was put the town square, from which roads were thrown out to all parts of the town. A second road of importance, Norton Way, was made to run north and south, about a quarter of a mile to the east and almost parallel with the Broadway. The shopping and commercial area was placed between the town square and the station, with residential areas surrounding it. The factory area was placed to the east of Norton Way, where it was screened by rising ground and trees from the greater part of the residential districts. Norton Common, which consisted of about seventy acres of woodland, though close to the station on the north side and consequently of considerable value as building land, was rightly preserved as an open space, and the only other piece of land with trees and shrubs upon it in the town area, the strip now known as Howard Park, was also happily retained, though this land also had immediate building value. Letchworth Park, in the south-west, was laid out as a golf-course.

Of the total area of 3,822 acres, approximately 1,250 acres were included in the original town area, the remaining 2,500 acres constituting the agricultural belt. After the town-plan was prepared additional land was purchased at various times, and the

total area of the estate is now 4,598 acres. The gross town area, which has been modified from time to time, is now approximately 2,182 acres, from which about 158 acres must be deducted for roads and 306 acres for open spaces, leaving approximately 1,718 acres net in the town area for development, of which 1,399 acres are for residences. On this area a population of 35,000 was proposed; the original figure in Unwin's plan was 33,000. This is equivalent to twenty-five persons per residential acre.

When the plan was adopted Unwin and his partner, Barry Parker, became the consulting architects to the company, and were given a part in carrying it into effect. They had a share, therefore, in the control of building, the preparation of building regulations, and the application of the plan to the practical work of development. Unwin, however, gave very little time to Letchworth after his removal to Hampstead Garden Suburb in 1907, and retired altogether even from his nominal connection in 1914, since which date the work was carried on by Barry Parker, until he retired in 1943. The company then looked after the matter by its own staff. Barry Parker died in February 1947.

#### § 4

The first step after the preparation of the preliminary town-plan was the publication by the company of a pamphlet addressed to those who intended building in the new garden city, setting out the ideas of the promoters and the general lines they wished followed. Unwin had a prominent share in the preparation of that document. It is of sufficient interest for some part of it to be reprinted here:

#### GENERAL SUGGESTIONS AND INSTRUCTIONS REGARDING BUILDINGS OTHER OTHER THAN FACTORIES ON THE GARDEN CITY ESTATE

The directors of First Garden City Ltd. are convinced that the high standard of beauty which they desire to attain in Garden City can only result from simple, straightforward building, and from the use of good and harmonious materials. They desire as far as possible to discourage useless ornamentation, and to secure that buildings shall be suitably designed for their purpose and position.

The company will prepare building plans of the sites on those parts of the estate intended to be first developed. Upon the plans will be set out:

(a) The areas within which houses may be erected and by which the boundaries of the land intended for front gardens, for traffic, or for recreation purposes, will be defined.

(b) Any provisions as to the height of buildings, the extent to which trade buildings will be permitted, and to which buildings may be erected behind the main buildings. . . .

In certain cases it is not proposed to enforce a hard-and-fast building line, but some simple regulation as to building area will be made. Houses may be set back or forward within certain limits, and may be set at varying angles where this would be advantageous. A building line will be suggested in the first place by the company, and any alteration which the intending builder proposes to make will be carefully considered in each case. Particulars will be provided to the applicants for each plot together with the tracing of the plot agreed to be taken.

It should be remembered that a sunny aspect for the main rooms is almost as important as ample air space, and that other considerations, such as fronting the houses or cottages to the road, are of little importance in comparison. In Garden City ample frontage will be provided, and it is hoped that builders will not think of erecting those common, unsatisfactory rows of narrow



houses, with unsightly 'backs' projecting behind to the exclusion of air and sunshine, for which the chief reason has been the high cost of frontage in existing towns. One suitable arrangement will be found to be that of having no outbuildings at all; the w.c. or E.C. being under the main roof and entered from the porch or from a lobby outside.

The buildings must have their external walls and roofs constructed with approved materials. The common arrangement of a faced front with inferior materials for sides or back will not be encouraged in detached houses. The directors prefer that one quality of material should be used throughout each house, and one character of building maintained on all its sides.

If plots are fenced, it should be with hedges of approved character, and simple temporary fencing will be permitted until such hedges have grown sufficiently to form an effective fence. All fencing must be subject to the approval of the company's surveyor.

The promoters believe that by encouraging quite simple buildings, well built and suitably designed and grouped together, they will be helping to secure for the garden city a special charm and attractiveness by methods which experience shows are better calculated to ensure them than the lavish use of pointless ornament. They quite realize, however, that in good hands tasteful ornament used with due reserve may add much to the interest and beauty of the town, and would welcome such work accordingly.

At the same time a series of 'Bye-laws with respect to the Drainage of Buildings on the Garden City Estate' was issued, which was followed by the preparation of building regulations which set out the requirements of the company in detail. The garden city company had no other powers for the carrying out of their scheme beyond the powers belonging under the ordinary laws to every landowner. As owners of the estate in fee-simple, which is the most absolute form of ownership known in England, they had the right to make what conditions they pleased with regard to the use of their land. The building regulations, therefore, laid down the conditions the company required to be observed by all persons taking land on the estate, and were enforceable under the terms of the leases and agreements granted by the company. The regulations included the building by-laws of the rural district council and afterwards of the urban district council. Their general objects were to secure that buildings were soundly constructed, that building lines and areas were observed, and that the character and amenities of the town were preserved. Under these regulations plans, elevations, and an abstract specification of all buildings to be erected have to be submitted to the company for approval, which is the usual practice on all estates.

## § 5

The carrying out of the town-plan was the work of the company's estate department in conjunction with the consulting architects. It will be seen from a comparison of the plan of the town with the original town-plan that the main lines of the original scheme have been followed. Here and there will be noticed modifications in detail; for instance, the line of Norton Way is slightly changed and the north-east area has no new roads running north and south, and has three roads instead of five running east and west. One of the important changes is in the area just north of the railway station, which according to the original plan seems to have been intended to form a shopping area, or



at any rate a district of some importance, with a formal lay-out; the placing of the cottage exhibition of 1905 on this site upset the plan. The first road to be constructed, Broadwater Avenue, was not made according to the plan, and indeed the line of this road both as carried out and as originally planned was not a good one because of the contours. The original factory area was, it is clear, too small: the area originally set aside for that purpose, including railway sidings, gas works, and similar purposes, was about 110 acres. It has since been extended to 230 acres, with a further 23 acres on the west of the estate.

## § 6

The lay-out of the shopping area and its subsequent development is worth studying. Station Road, which proceeds from the railway station towards the industrial area and the roads leading to the north-eastern part of the estate, has shops on the southern side and cottages on the northern side for half its length, with more shops opposite the hotel where the road joins Norton Way. The development of this road cannot be regarded as being satisfactory from any point of view. The cottages, built in 1905, are out of place on it, and the shops at the eastern end, built in 1920, are equally out of keeping. The lay-out of the north of the road should have been confined to shops or houses; the mixture is disagreeable and cannot be regarded as good planning. Leys Avenue is at least a picturesque road and the buildings, some erected by a shop-building syndicate, are good. Shops also disport themselves in the Wynd, which is a narrow road joining Station Road with Leys Avenue, constructed partly to give back-access to the shops fronting on these two roads and partly for the purpose of developing the inner triangle of back land. The original intention was that the land should be used for workshops; but the workshops, in the course of changes of tenancy and growth of business, have become shops of various kinds for which neither the buildings nor their positions are fitted, and they now constitute a defect of some consequence in the Letchworth plan. The economic use of land in such a position is a problem for the estate developer, and the experience of Letchworth is to be avoided. Commerce Avenue, which runs from Leys Avenue to Gernon Road, is also used for a mixture of cottages, warehouses, workshops, and shops. The student may ask himself to what extent the problem has been solved here, and the answer must be, not at all. Eastcheap, Broadway, and Westcheap constitute the remaining parts of the shopping and business area of the town. Building on Eastcheap has already been considerable; but it will no doubt be some years before the area is anything like filled. The danger that will need to be watched in the future planning and building for the area is, in the present writer's opinion, that of straggling development. Shopping areas need to be compact to secure the maximum efficiency; it will need great skill to develop Westcheap, for example, so as to secure really good results.





LETCWORTH ESTATE SHOWING DEVELOPMENT TO SEPTEMBER 1948

## §7

The characteristic feature of Letchworth is the open lay-out of the roads and houses so that the whole town preserves some of the features of a garden. Every road is planted with trees, with greenswards along all but the busiest roads and some of the narrower residential roads; and the hedges to the house-plots, and the trees, shrubs, and flowers in the gardens give the town a park-like and very pleasant appearance except during the winter, when its architectural deficiencies are laid bare. The street trees add much to the attractiveness of the town, and on the whole they have been well chosen. After more than forty years people say that Letchworth has too many trees, by which remark they mean that large street trees shade their gardens too much. This is a fact, and many large trees are not suitable for street planting except in a few selected positions. The small flowering tree is a better subject for general use. The following is a list of the trees planted and the roads where they may be found:

## THE TREES OF LETCHWORTH AND THE STREETS WHERE THEY ARE PLANTED

<i>Acer dasycarpum</i> (Silver Maple)	Works Road
<i>Acer platanoides</i> (Norway Maple)	Hitchin Road
<i>Acer platanoides digitata aureo-marginatum</i> (Norway Maple)	Ridge Road
<i>Acer platanoides Reichenbachii</i> (Professor Reichenbach's Sycamore)	Norton Way N.
<i>Acer platanoides Schwedlerii</i> (Dr. Schwedler's Maple)	Nevells Road; Bursland; Eldefield; Monklands
<i>Acer Pseudo-platanus</i> (Sycamore)	Pixmore Avenue; Baldock Road; Nevells Road; Green Lane; Rushby Mead; Shott Lane; Sollershott W.; Pixmore Way E.; Rushby Mead S.; Works Road
<i>Acer saccharinum</i> (Sugar or Bird's-eye Maple)	Broadway N.; Commerce Avenue
<i>Aesculus carnea</i> (Red Horse Chestnut)	Willian Way; Station Place; Field Lane
<i>Aesculus Hippocastanum</i> (Horse Chestnut)	Norton Way; Station Place; Sollershott E.; Willian Way; Pixmore Way; Dale
<i>Betula alba</i> (Silver Birch)	Paddock Close; Station Road; Broadway N.; South View; Cowslip Hill
<i>Carpinus Betulus</i> (Hornbeam)	Town Square
<i>Catalpa syringaefolia</i> (Indian Bean)	South View
<i>Cedrus Deodara</i> (Deodar Cedar)	Town Square
<i>Crataegus oxyacantha</i> (Common Hawthorn)	South View
<i>Crataegus oxyacantha alba</i> (Hawthorn)	South View
<i>Crataegus oxyacantha Charles X</i> (Scarlet Thorn)	Common View
<i>Fagus sylvatica</i> (Common Beech)	Town Square; Letchworth Gate
<i>Fraxinus americana</i> (White Ash)	Broadway N.
<i>Fraxinus excelsior heterophylla</i> (Simple-leaf Ash)	Lytton Avenue
<i>Fraxinus Ornus</i> (Manna Ash)	Broadway S.; Lytton Avenue; Glebe Road
<i>Laburnum alpinum</i> (Scotch Laburnum)	South View
<i>Laburnum vulgare</i> (Common Laburnum)	South View
<i>Laburnum Watereri</i> (Waterer's Laburnum)	South View
<i>Populus alba</i> (White Poplar)	Gernon Road

<i>Populus caroliniana</i> (Lombardy Poplar)	Ridge Avenue
<i>Populus fastigiata</i> (Lombardy Poplar)	Town Square; Station Way
<i>Populus nigra pyramidalis</i> (Lombardy Poplar)	Hillshott
<i>Prunus Amygdalus</i> (Almond)	Icknield Way; South View, The Crescent; Hillshott; Mullway
<i>Prunus Cerasus Rhexi flore-pleno</i> (Double Cherry)	Icknield Way W.
<i>Prunus Laurocerasus</i> (Cherry Laurel)	Glebe Road
<i>Prunus Padus</i> (Bird Cherry)	South View; Common View
<i>Prunus Pissardii</i> (Purple Plum)	Paddock Close; Cashio Lane; South View; Icknield Way W.
<i>Pyrus Aria</i> (Whitebeam)	South View; North Avenue; Highfield; Letchworth Gate
<i>Pyrus aucuparia</i> (Mountain Ash)	South View; Leys Avenue; Cross Street; Broughton Hill; Abbotts Road; Chiltern View; Field Lane; High Avenue; Hillbrow; Rowan Crescent
<i>Pyrus communis</i> (Pear)	The Quadrant; Souberie Avenue
<i>Pyrus Malus Atrosanguinea</i> (Dartmouth Crab)	South View
<i>Pyrus salicifolia pendula</i> (Crab)	South View
<i>Rhus typhina</i> (Stag's Horn Sumach)	South View
<i>Robinia Pseudacacia</i> (False Acacia or Locust Tree)	Meadow Way; Spring Road; Broadwater Avenue; Eastcheap
<i>Robinia Pseudacacia Bessoniana</i> (Round-headed Locust Tree)	South View; Birds Hill; Works Road
<i>Robinia Pseudacacia inermis</i> (Red-flowering Locust Tree)	South View
<i>Tilia dasystyla</i> (Broad-leaved Lime)	Pixmore Avenue; Broadway (middle); Norton Way N.; Gernon Road; Redhods Way; Rushby Mead
<i>Tilia parifolia</i> (Small-leaved Lime)	Broadway (middle)
<i>Tilia vulgaris europaea</i> (Lime)	Norton Way; Station Place
<i>Ulmus glabra cornubiensis</i> (Cornish Elm)	Town Square
<i>Ulmus monumentalis</i> (Weeping Elm)	Pixmore Way

Tree-planting on the central plateau to form the town square and along the line of Broadway was done at an early date, and at the same time hedges were planted on the road boundaries and groups of trees and shrubs at intervals in the area; the result was that when the Broadway was constructed in 1924, the trees and hedges were well grown and added to the attractive appearance of the road.

The only piece of formal planting in the town is in the portion of Broadway from the town square to the station, which is simply laid out with trees and evergreen shrubs in variety in two strips 12 feet in width with a 16-foot gravel walk between. It was intended that when the town square was made it should continue this formal planting. Howard Park is a small park of four acres along the side of Norton Way, consisting of the remains of a small piece of woodland, through which the Pix brook runs. Norton Common is the chief natural feature of the town, consisting of seventy acres of woods and shrubs; it was taken over in 1922 by the urban district council as a public open space for 990 years at a peppercorn rent, the company reserving the frontages on the Icknield Way and Wilbury Road. This old piece of common land thus became public property, the company having purchased all existing rights. When the estate was



originally acquired the common became its private property. The district council made on the common one of the most modern swimming pools in the country; the council has also constructed hard tennis courts and bowling greens. Letchworth Park, in the extreme south-west of the estate, is a charming piece of country with fine views, on which the golf-course has been laid out.

## § 8

Every one at Letchworth is, and always will be, near to the open country, which being within walking distance from every part of the town can be enjoyed as part of the ordinary lives of the inhabitants. We say the country always will be near; but that will depend upon the vigilance of the townspeople and the extent to which they desire to preserve their garden city. The old town of Hitchin extended its boundaries to include the adjoining village of Walsworth, so that Hitchin urban district now adjoins the Letchworth urban district. Letchworth has become larger than Hitchin in population and ratable value, which provoked the latter to prepare plans for extension, and the growth of Walsworth and the building upon Letchworth Hill are to be deplored. It is essential in the interests of both towns that a belt of agricultural land should separate them, and if the people of both towns are wise they will take care that Hitchin does not develop further in the direction of Letchworth. This is now, under the Town and Country Planning Act, 1947, the responsibility of the county council as the planning authority.

## § 9

It was no doubt an inspiration of Unwin's to place the centre of the town on the small plateau immediately to the south of the railway. It was nearly the centre of the estate, and the three oak-trees that stood there drew him to the spot, as he admitted. From thence his imagination quickened, he visualized the whole lay-out of the town. Norton and Norton Common could be seen and the Weston Hills to the south-east, while the aspect of the land, almost bare of timber as it was, invited a town-planner to make something of it. To this centre Unwin brought his main highway. At one time, as he tells us, he considered making the road called Norton Way, which runs through the town directly north and south, the main highway. The present writer has ventured to think that the plan might have been improved had he done so. Let us see for a moment what the effect of it might perhaps have been. We should have had a road running through the town from north to south with the possibility of extension through the village of Willian on the south to the Great North Road, thus giving excellent highway connection with London, but without the danger of diverting through traffic into the town. The road would have separated the industrial area from the residential area, while the planning of the triangle made by Leys Avenue and Station Road as the commercial and business district would have brought it nearer to the industrial district than it is now. The town centre, with the municipal buildings, could have been placed just off Norton

Way (on the section marked with a 'K' in a circle on the original plan). The railway station would have been somewhat to the east of that road. This was the alternative site chosen by the railway company and preferred by it. The railway goods yard and sidings had to be placed near the factory area, and the railway company desired to have the passenger station near the goods station for administrative purposes. It was only with considerable difficulty, and after some years, that they were induced to build the permanent railway station on the site selected by the architects. The whole of the area to the west of Norton Way would then have been residential, with a large open space where the town square is planned. Howard Park, on Norton Way, would have remained as it is, except that it could have been extended on the east, making a very pleasing feature near the shopping area and separating the factory area from the rest of the town. The factory area would have formed roughly a triangle, with its base-line running (though in not quite a straight line) from the site just suggested for the railway station to the point where Dunhams Lane touches the Baldock Road.

Well, so we may improve on the event; and no doubt both Unwin and Parker did so in their minds many times after the plan was made.

There is no doubt that in town-planning we have moved a certain distance since Letchworth was designed. We have had legislation in the Town Planning Acts of 1909 and since, up to 1947, with the creation of a professional institute of town-planning, numerous books, and a vast volume of discussion; but in essential ideas it is doubtful if we have much improved upon those expressed in the Letchworth plan.

## § 10

The Letchworth town-plan had originally no statutory effect. When it was prepared and put into operation there was, indeed, no general town-planning legislation. The plan remained the private affair of the garden city company, and its administration was entirely the company's affair, too, though it consulted the district council, of course. Not until 1938 did the urban district council resolve to prepare a town-planning scheme under the provisions of the Town and Country Planning Act, 1932; but in fact, nothing substantial was done to carry out that resolution. The intention was to adopt the garden city company's plan, to make it statutory, and for the council itself to administer it and be responsible for any modifications.

When Sir Patrick Abercrombie prepared his Greater London Report, 1944, Letchworth came within this area, being some miles outside the London 'green belt' but just within the 'outer country ring.' Sir Patrick was of course already familiar with the town and its plan, and his references to Letchworth in the report were frequent. He accepted the company's figure of 35,000 as the population to be provided for, but he criticized the company's wish to increase the industrial area of the town, an aspect of the subject to be discussed later. He was much concerned about the town's green belt. Certainly both on the east and west, on the Hitchin and Baldock sides of the town, there arises need for

concern. Neither of these towns should be permitted to continue its development towards Letchworth, and already not a little infringement has taken place upon what ought to be regarded as the green belts of all three towns.

The relation of Baldock to Letchworth is inevitably close because the garden city estate runs into the old town. Baldock is a small urban district on the Great North Road, with a population when Letchworth was founded of less than 2,000, now doubled. Originally, with its wide main street upon which were many large old houses, Baldock was a charming town; but the effect of the garden city, together with motor transport, has been to change its appearance greatly; the old residences have been converted into business premises and the charm of the town has wellnigh disappeared. There is a large hosiery factory and some other small industry, but apart from the business arising from its position on the Great North Road at the junction of the roads to Royston and Cambridge, the town is dependent partly upon agriculture, as it always was, but mainly upon its proximity to Letchworth. There have been proposals for the amalgamation of the two towns, for as the map shows there is practically no separation between them, and Baldock seems to fit into a reasonable extension of the Letchworth plan. But, no doubt, there is much to be said for keeping the old town intact, though its control over its own amenities needs to be more active, and it should not be allowed to extend along the Great North Road or in the direction of Letchworth. One advantage of amalgamation would be the possibility of the extension of the industrial area of Letchworth, and the development of land between Norton and Baldock. Local feelings, as always, are, of course, strongly against anything of the sort, and ideal solutions are not possible. All that can be expected is that without amalgamation the physical integrity of the two towns will be maintained, that neither will encroach upon the other, and that the spirit of co-operation should increase so that common interests may be furthered.

The town-planning position has now undergone radical change as a result of legislation, and the town-plan has virtually passed out of the hands of the garden city company and comes under the control of the Hertfordshire County Council under the Town and Country Planning Act, 1947.

The development of the Letchworth plan is affected by the decision of the Minister of Town and Country Planning to accept a recommendation of the Advisory Committee for London Regional Planning, in its report of July 1946, that the population of the garden city should not exceed 32,000. This is to reduce the company's proposals for development and is not easy to understand.

## § 11

The roads are named after local persons or fields, etc., and the method of street numbering is to start from the north end of roads running north and south, and the west end of roads running east and west, odd numbers being on one side of the road and even numbers on the other.



## § 12

The consulting architects at first endeavoured to exercise control over building in the town. They had in their minds what they wanted to see built, and they did their best to get that carried out; but it is one thing to do what one sees oneself and another to induce someone else to do it. The first sites were taken by small speculative builders who designed their own houses, and by people who wished to build for themselves and employed architects of their own choice. Many of these people did not readily fall in with the ideas of the consulting architects. The speculative builder wanted to put up a type of villa that was everywhere being built and had proved attractive to the public, and out of which he could make money. It can easily be imagined that his ideas were not acceptable to Unwin or to Parker, any more indeed than they would have been acceptable to other architects. But the speculative builder was often not impossible to deal with. He was ready to listen to what was said to him and to accept alterations to his plans; he was even ready, if need be, to spend a little more money than he at first intended, so as to make his house satisfactory, provided there was not too drastic a departure from his building programme. Yet when the best had been done the result was seldom what the architects wanted. The client with his own architect was more difficult in every way. When a man wants a house for himself he does not always find it easy to consider other people's opinions; he wants to build what he likes; and when he has an architect to carry out his wishes the client and the architect together can make a very formidable opposition.

It is not surprising, therefore, that conflict arose in the attempt to secure architectural control over buildings, especially over the appearance of buildings; and Parker & Unwin had an extremely troublesome task. They undertook it, however, with great spirit and energy, and were prepared to stand by their opinions. But the garden city company wished to let sites with as little difficulty in the way as possible, and though the enthusiasm of the architects inspired the directors and their officials to go with them some distance, it did not take them the whole way, and, as the company was not prepared to lose too much, if any, business, the client and his architect got in the end pretty much what they wanted. Indeed, the cultivation of architectural taste seemed to have, in the minds of the directors of the company and their officials, some association with the eccentricities of opinion and behaviour with regard to which there was already a determination that they should not be welcomed in the town. In the result the consulting architects were forced to modify their attitude. Without any general standards that were accepted by the parties concerned, and in particular without any existing architectural standard in the town itself (which in the absence of a general standard of architectural practice there could not be), it was practically impossible to enforce what the architects desired.

The upshot is that Letchworth has, it cannot be denied, marked architectural deficiencies. It has had no large building projects in which architectural skill has been displayed.

and even its small buildings, apart from the housing schemes, have not been carried out on a scale to give unity to any part of the town. Unwin as an architect never answered the question, How should the modern town be built? His best-known contribution was that 'nothing was gained by overcrowding.' At Letchworth he endeavoured to put into practice ideas that he had worked out some years earlier in the book from which I have already quoted; but he did not succeed. Unwin's grasp of the problems of town growth was not scientific, nor in the true sense constructive, but what may be described, despite the eloquence of his expositions, as abstract and sentimental. He would speak of the town as a whole but his mind was not on structure but on social-aesthetic elements, or surfaces of the town, rather than on what gave it reality. Thus he fought for picturesque gables and hand-made tiles, and waged a battle for his ideas that was lively but unconvincing to beholders and inconclusive in its issue. Those who opposed him at Letchworth were right, though they did not possess his skill in argument. Also their opposition was more instinctive than substantial, for they had no ideas or even technical schemes of their own. Yet they won and Unwin lost, and the results were lamentable.

Why he lost is to be found in his famous book *Town-Planning in Practice: an Introduction to the Art of Designing Cities and Suburbs* (1909), a book that established his reputation, and has been widely consulted if only because of the great wealth of plans, maps, and pictures that it contained. Its writing had charm and persuasiveness, but devoted to inadequate ends. What he set out to do was to expound and discuss the application of Camillo Sitte's ideas. Sitte was a Viennese architect, who in 1889 published a book, *Der Städte-Bau nach seinen künstlerischen Grundsätzen*, which had had a remarkable effect upon all German-speaking lands. Sitte is to be recognized in that book as the father of modern town-planning, for he endeavoured to establish principles. He did this by examining the structure of classical and medieval towns, and thus distinguished three main principles: (a) the deliberate informality and irregularity of their building, (b) the grouping of buildings in accordance with this principle of informality, which involved the recognition of the relations between buildings, and (c) the recognition of the parts of the town as units. Sitte's aim was to re-establish a system of organic town-building; but he did not possess comprehension of modern mechanics and of the necessary elements of the industrial city. Neither did Unwin.

The latter accepted the principle of informal formality as sufficient, and, though he did acknowledge the further principle of the parts considered as units belonging to a whole, he did not, except for giving much attention to the enclosure or place as a planning unit, carry the idea further. Unwin's was an intellectually incomplete appreciation of the problem of the town, which missed the real nature of the problem.

When Unwin's attempt at control was defeated at Letchworth, there was no one, not even Barry Parker, his closely allied partner, who could second it. Unfortunately, there were no other ideas in the field, only conventional and unimaginative practice, only habits of building brought from other places, particularly from Lancashire, even

Manchester, which accounts for the architectural insufficiency of the garden city. As a consequence, Letchworth was built far too naturally. Without adequate human guidance the town grew as it was able. The effect of natural growth in towns is often admired. Nature has her own beautifying methods, time smooths out crudeness, and ugliness can be conquered, so that buildings placed where they do not belong or badly designed buildings may become tolerable, and even be given attractiveness. That is what has happened at Letchworth.

Art is absent. Lack of uniformity in building and the individualistic character of most of the houses are the town's architectural characteristics. This is better, every one will agree, than the monotony of the suburbs where streets are built up by the speculative builder according to his own ideas of art and beauty; and though all speculative builders are not devoid of knowledge, the mass of middle-class houses throughout the country is robbed of architectural interest, which accounts for the suburbs being dull. It is better, too, than the monotony of the housing estate, which hardly any architect has been able to overcome, and brings everything to a dead level of mediocrity. At Letchworth the houses are individual, some good, some bad, but most with some sort of character if only because they were not built *en masse*. What causes them to be agreeable, and makes the streets pleasant, are the gardens and grass verges to the roads. Nature has brought beauty to the town where man has not, so that while hardly anywhere will you meet consistent architectural treatment of building, yet almost everywhere there is something at least to refresh the eye and give pleasure. Here, where there has been too little art, nature has disguised the omission, and the generous opportunities given to her have been to the town's great advantage. All the same, as towns are among the major works of man, the garden city does not take the position that its original impulse and the earnest desires of its founders entitled it to hold, so that Letchworth, which contains hints and suggestions of the future, is not the archetypal town in a planning sense that it was meant to be.



## CHAPTER III

### ITS SHOPS

. . . the field is open: and there is nothing to prevent the influx of new energies. . . .—ALFRED MARSHALL,  
*Industry and Trade*

#### § 1

EBENEZER HOWARD regarded the shops as not only a feature of his garden city scheme, but one of its sources of revenue. His idea was to place around the central park a wide glass arcade, making a combination of winter garden and shopping centre, which should be 'one of the most favourite resorts of the townspeople.' These ideas were not applied to Letchworth; but as shops are so important an element in town life they deserve a chapter to themselves. Some of the promoters of Letchworth were very anxious that the co-operative movement should be associated with the town, and a public meeting was held in London in March 1904, six months after the scheme started, attended by large numbers of representatives of co-operative societies and many public men, with a view to getting those responsible for the co-operative movement to establish workshops and stores in the new garden city. (A report of the proceedings is contained in a pamphlet entitled *Garden Cities and the Realization of the Co-operative Ideal*. Printed by the Co-operative Printing Society, Manchester, 1904). But the co-operators could not be induced to do anything. Howard wrote about this matter in the following terms some years later:

The shopping system of Letchworth is now very much on conventional lines, not at all what it might have been if sufficient imagination and enterprise had been brought into play. The founding of a new town afforded a fine opportunity of which the Co-operative Wholesale Society should have availed itself to the utmost; and I did my best to urge them to do so. But the splendid faith of the pioneers of the co-operative movement did not appear to animate the then managers; they shared rather in the general scepticism, and regarded the first garden city as a wellnigh hopeless experiment, and so took no active part in it. But when a second experiment comes to be tried in the near future, if the Co-operative Wholesale Society does not quickly come forward with a really bold scheme, and with ample capital to carry it out, then a subsidiary company or society should be formed at the very outset, for the purpose of supplying the future townspeople with everything they may want at little over cost price. For it is of vital importance to the well-being of the people that the purchasing power of money should be made as high as possible; and to this end waste must be kept down to the minimum.

It is quite true that the rents derived from the letting of shop sites might be by this plan reduced; but that would be but a very small matter as compared with the tendency to more rapid development of the town, which would follow from low prices. Under such a system, too, the whole body of distributors might enjoy shorter hours and better and more secure employment, while the chief shopping quarter of the town might be made vastly more interesting and attractive.

The shops of Letchworth have thus had a normal growth. The first to be established was a sub-post office and small general store at Letchworth Corner. A co-operative society was also formed and started business, but it was some years before it established itself in a sound position. It is now the largest retail business in the town,

and, having amalgamated with the struggling society in the neighbouring town of Hitchin, has branches throughout the district. In the meantime shop sites were laid out and offered to those who would take them and erect premises. The first schedule of plots issued in June 1905 offered sites for shops in Station Road at ground-rents of



LETCHWORTH: SHOPPING CENTRE (SEPTEMBER 1948)

The railway station is at the top left hand. The shopping streets are Station Road with three blocks of houses on the north side; Eastcheap, which is wholly shopping and commercial; Leys Avenue, which is wholly shopping, though many of the shops have living accommodation over them; Commerce Avenue, which is shopping and commercial except for houses at the south end; the Wynd (running from Leys Avenue to Station Road), which has small shops and workshops. Norton Way, running north-south on the extreme right, is wholly residential with two churches; Howard Park is on the west. Norton Way North (not shown on the plan) has a few business premises.

£1 16s. 3d. to £3 2s. 6d. per plot per annum, being calculated at the rate of £10 per acre per annum, for a 99-year lease. A note in the particulars says: 'A cash premium is payable for each lease, the company undertaking to restrict competition on terms to be arranged.' Eight of the nine sites offered were let by the following year, together with four other shop sites in Leys Avenue. No cash premiums were secured, however, and no definite agreements were entered into to restrict competition. One or two only of the sites were let at the advertised rents, the others fetching somewhat higher rents; the area disposed of for commercial purposes in 1905 being just over one and a half acres at a total ground-rent of £40, but not all of these sites were for shops or were in the shopping area. The shops were placed on the triangle of land formed by Station Road and Leys Avenue, the apex of which is close to the station. The shops all contained





Butcher . . . . .	1
Cycle Agent . . . . .	1
Dairyman . . . . .	1
Drapers, etc. . . . .	2
Drug Stores (not a chemist) . . . . .	1
Fishmonger . . . . .	1
Fruiterer, etc. . . . .	1
Furnishers, etc. . . . .	3
Grocers and Provision Merchants . . . . .	4
Hairdresser . . . . .	1
Ironmongers, etc. . . . .	4
Jeweller . . . . .	1
Newsagent, etc. . . . .	1
Outfitters . . . . .	2
Stationer . . . . .	1

A majority of the businesses were engaged in more than one trade, but each has one place only in the above list, under its main trade. There were also a few people conducting business from private houses or elsewhere than in the shopping area; these have been excluded. There were in addition four hotels, fifteen builders, and five builders' merchants, though a number of the builders also traded as builders' merchants. One trading concern not included in the above figures, as it conducted business in a temporary wooden shed outside the shopping area, was a co-operative enterprise called Garden City Small Holdings Ltd., which existed for the purpose of disposing of the produce of the small-holders established in the agricultural belt. A good deal of energy was put into the conduct of the business, but it ultimately failed because supplies could not be relied upon; shortages alternated with gluts in a manner which proved neither profitable to the producer nor satisfactory to the consumer. This was due, of course, to the restricted market.

The position with regard to shops in Letchworth in 1925 and 1947 is worth recording and is shown below. Of the businesses existing in 1907 thirteen had disappeared by 1925, others were in other hands, and twelve remained in the same hands.

	1925	1947
Bakers . . . . .	4	4
Banks . . . . .	3	3
Bookseller (second-hand) . . . . .	1	—
Boot and Shoe Makers and Repairers . . . . .	13	9
Butchers . . . . .	10	13
Cafés . . . . .	1	3
Chemists . . . . .	3	4
China and Glass Dealers . . . . .	3	1
Clothing (second-hand) . . . . .	—	1
Confectioneers . . . . .	5	4
Corn-chandlers . . . . .	4	2
Cycle Agents . . . . .	5	6
Dairymen . . . . .	4 <sup>1</sup>	5
Drapers, Milliners, etc. . . . .	14	15

<sup>1</sup> Also two who have no shops, working from farms.

## THE BUILDING OF SATELLITE TOWNS

Dry Cleaners . . . . .	1	4
Electrical Engineers . . . . .	2	1
Fancy Goods . . . . .	7	7
Fishmongers . . . . .	3	2
Funeral Furnisher . . . . .	—	1
Furnishers, etc. . . . .	5	5
General Stores . . . . .	2	2
Greengrocers . . . . .	9	9
Grocers and Provision Dealers . . . . .	13	13
Hairdressers . . . . .	6	10
Heating Engineer . . . . .	—	1
House Agents . . . . .	4	3
Ironmongers . . . . .	4	7
Library . . . . .	—	1
Music Stores . . . . .	2	1
Newsagents . . . . .	2	2
Outfitters . . . . .	10	5
Opticians . . . . .	—	2
Photographers . . . . .	2	1
Picture Framers, etc. . . . .	1	1
Plumbers, etc. . . . .	2	1
Radio Engineers . . . . .	—	2
Sewing Machine Dealer . . . . .	1	—
Snack Bar . . . . .	—	1
Stationers . . . . .	3	5
Tailors . . . . .	5	2
Tobacconists . . . . .	3	10
Typewriting Office . . . . .	1	—
Watchmakers . . . . .	3	2

In 1925 there was already a large co-operative stores, now greatly extended. The hotels have (1947) been reduced to one (in addition to Letchworth Hall in the rural belt), there are only eleven builders, but seven builders' merchants. There are four motor garages. Many of the shops were in 1925 concerned with more than one trade, which is still true; in fact the tendency to include additional trades within the same premises increased during the second war. Each shop is included only once in the above lists, however, under its main trade. Occasionally more than one shop was owned in 1925 by the same person or firm and this tendency seems to have increased in the interval. There are nine shops altogether belonging to various chain-store companies, a smaller percentage than is usually found in towns of this size. There was some business done in private residences, for the company's control did not seem to be effective, but the war checked this, and it is agreed to be an undesirable thing. There are of course professional firms in the commercial area, solicitors, accountants, architects, and others. The number of doctors in practice in the town is ten.

An outcome of the second war upon the shops of the town has been to prevent development, to reduce the number in some trades because of the shortage or absence of supplies, and to bring into operation a few more trades, which is noted above.

## § 3

In addition to the main shopping area, there are two general stores (one being a sub-post office) at Norton, a general stores in Common View, a sub-post office and small stores at Letchworth Corner, a general stores in Pixmore Avenue, two general stores in Spring Road, and another pair at the Bursland-Bedford Road corner. These shops were opened to meet the needs of people living at some distance from the centre of the town; but the premises and business are relatively small because practically the whole of the shopping business is done in the centre.

## § 4

The shopkeepers on the whole seemed to be doing well in 1925, and are to-day more prosperous than ever. Very few of the premises are large or capable of much extension, and the individual stocks in 1925 did not appear to be large. At the moment of writing stocks are as vaguely fluctuating in Letchworth shops as elsewhere. The people from the surrounding villages and Hitchin are shopping in the town in increasing numbers, and since the improvement in motor omnibus facilities the incoming trade has grown considerably, so that the place has long counted as a shopping centre in the county, which is no slight achievement. A number of the shopkeepers have established branches in the neighbouring towns. At one time it was estimated that 50 per cent of the wages and salaries paid in the town was expended elsewhere; but in 1935 it was considered that not more than 20 per cent went out of the town and that figure has certainly not increased. It is worth noting that the tradesmen said that the open lay-out of the town, and the smaller number of houses to the acre than is built elsewhere, increased the cost of the delivery of goods. This applies to all building development on the same principle as that observed at Letchworth, and is of some consequence in relation to the effect of town- and site-planning upon the cost of living.

There is undoubtedly scope for the improvement of shopping facilities as soon as opportunity arises for building to be done. The increase of little shops handling non-specialized commodities and branded goods is of small economic value, though people sometimes think such shops offer an easy way of making a living. What is required at Letchworth are more shops specializing in goods and services, and also some larger shops in which more comprehensive and varied stocks can be carried than is now possible having regard to the size of existing premises. Such development as that which has been permitted in the Wynd, Commerce Avenue, and Eastcheap should not be continued, and indeed should be got rid of as soon as possible; for, while ample provision should be made for workshops for craftsmen, who should, of course, sell direct to the public if they choose, there should be effective means of preventing such workshops when they change hands from being converted into shops. There is space for new shopping development in the centre, and, carefully carried out, this could be made of great economic and social advantage to the town.



## CHAPTER IV

### ITS INDUSTRIES

Letchworth is planned to co-ordinate the ordinary activities and occupations of human life with natural beauty, companionship, recreation, amusement, and hygiene; regular work and peace of mind so far as these can be given by a satisfactory environment. In its clean, bracing air Letchworth looks good to live in: good houses, cottages well planned, no dwellings ranged unimaginatively in rows; excellent shops, first-rate schools and churches, and factories we are proud to show you. There is room in it. Factories, shops, and residences do not elbow one another. There are trees and space for fresh air and sunshine.—The Rotary Club of Letchworth (Christmas 1924)

#### § 1

WHEN the town was planned, sites for factories, with the necessary transport, electric power, and other facilities needed for industry, were to be provided, because the promoters of Letchworth relied for the carrying out of their scheme upon the tendency of industrial concerns to move from the cities to the country. This economic tendency had existed throughout industrial history, in mediæval as well as in modern times, whenever city conditions became restrictive or too expensive. The idea at Letchworth was to create conditions in which industry would be better off than in the large congested towns on the one hand and in isolated country districts on the other. Thus it was hoped to tempt manufacturers out of the great cities, especially, of course, out of London. The factory area was placed to the east of the estate on both sides of the railway in such a position that it was out of sight of the greater part of the town and where the prevailing winds would carry away from the residential area any smoke there might be. The extent of the factory area was originally about 110 acres, extended to 135, then to 170, and now to 230 acres. A secondary area of about twenty-three acres, not provided for in the original town-plan, has been developed to the west of the railway passenger station on the north of the railway line for factories not needing siding accommodation. The total industrial area is now, therefore, 253 acres. The main factory area is served with railway sidings so that it has direct contact with the railway; and the gas and electricity works are in the area to secure economy of distribution to the factories.

#### § 2

In general conception and lay-out the industrial area of the town provided a form to be observed in what were afterwards to be called 'trading estates.' There was already an industrial estate at Trafford Park, Manchester, started in 1898, upon which, indeed, all subsequent trading estates have been based. But the difference between all these developments and that initiated at Letchworth was of fundamental importance, for at the garden city the industrial area was an integral part of the town, planned in relation

not only to the industrial services of power supply, transport, etc., but in relation to a community, to the homes of the workers, and to the town life as a whole. This feature of the garden city was noted by observers, but nowhere put into practice, because no doubt it called for more thoroughness in preparation and meant a much more complicated scheme than any one was prepared to face. Even when the Government undertook the establishment of trading estates to meet the needs of the depressed areas, the real lesson of the garden city was ignored. At Letchworth, however, the company set out to provide industrial facilities thinking always of the lives of the people who were to work in the industries, and of the community that these people would create.

Under legislation recently passed on industrial location and town-planning Letchworth's industrial area is no longer a matter solely for the garden city company. The Distribution of Industry Act, 1945, gives control over the erection of industrial buildings exceeding a certain size to the Board of Trade. The Town and Country Planning Act, 1947, makes the county council the responsible town-planning authority. The Minister of Town and Country Planning also exercises powers. This is a very different situation from that which existed when Letchworth was started, and one to which the existence of Letchworth has contributed; that there should be planning control over the location of industry was an object for which the garden city was founded. Reference has been made to the Abercrombie report on Greater London, and to Sir Patrick's contention that the industrial area of Letchworth should not be increased to 340 acres as desired by the company but should be kept to the present area of approximately 260 acres, at the outside. This recommendation was on the assumption that the town's population should be 35,000. Since then, however, the minister has decided that the population should not be more than 32,000, which may mean, but should not, a further reduction in the ultimate industrial area.

The first industries to come to the town were an engineering works and a printing office; the first lease for a factory was actually taken by Ewart and Son Ltd., but that firm did not build until six years later. The engineering firm was the Heatly-Gresham Engineering Works Ltd., which was removed for the purpose of extension of the business from Bassingbourne in Cambridgeshire; the firm, which has disappeared, as the business was discontinued for family reasons, was engaged upon the manufacture of continuous automatic vacuum brakes and oil, petrol, and gas engines. It was a successful concern. The printers were a group of men from Leicester who intended to establish a co-partnership printing industry. Their factory was built in 1905, and the business was conducted under the name of the Garden City Press Ltd. A year later the bookbindery of the well-known firm of W. H. Smith and Son was removed from London, and accompanying it was the Arden Press from Leamington, which had been acquired by the same firm. J. M. Dent and Sons Ltd., the London publishers, also established their bookbinding works in the town at the same time, and added a printing works later. Printing, bookbinding, and light engineering were therefore the original industries of the town, and they were considerable enough to give the place an industrial

character. These industries, having found the town a convenient one for their purpose, were followed by others in somewhat similar lines of business, as well as by motor car, corset, seed packing, and other trades. The industrial growth of the town though slow was definite.



LETCWORTH: INDUSTRIAL AREA (SEPTEMBER 1948)

The railway runs across the area from east to west. At the bottom left-hand corner is some early housing, with more at the top right-hand corner, and part of the residential area is shown at the top left-hand corner. The factory area is intended to be extended to the south. The gasworks and electricity generating station are shown.

The garden city company undertook no factory building on rental, though the desirability of such action was discussed by the board from the start. There was no agreement as to policy, and in fact there was not the capital. The company did, however, arrange for its subsidiary cottage company to put up a factory for one firm that did not have the capital to build for itself, and it assisted other firms to build their premises; and some of the directors personally took a financial interest in certain firms to encourage them to come to the town. But these were all new industries, and the assistance they received from the company was exceptional. Shortly before the first war, however, the company offered to arrange for factories to be erected for industries employing a good proportion of skilled male labour, and to let them on rental for a term of years or on a hire-purchase system. A 'tenement' factory was put in hand early



FIRST GARDEN CITY LTD  
TENEMENT FACTORY  
LETCHWORTH

Ground Floor Plan

Scale  $\frac{1}{16}"$

Nº1 Floor Space (including lavatories) = 2140 sq sup.  
Nº2 " " = 1600 sq sup.  
Nº3 " " = 1500 sq sup.

Floors Cement finished.

Pixmore Avenue.

Birds Hill.

§ 3

(c) Good housing for workpeople within reach of the factories.

(d) The preparation of plans for factory buildings to manufacturers' requirements and the supervision of the erection of buildings.

(e) Gas, electricity, and water at reasonable rates.

(f) Railway sidings conveniently placed for railway traffic.

(g) An attractive social life.

(h) Space and air for model factories.

The growth of the town was a result of the advantages, some of them exceptional, it was able to offer manufacturers. The chief of these were due to the fact that it began with a clean slate. Its industrial development was not an afterthought, as with many old towns, and it was not hampered by the accumulated burdens of the past. The economic and physical needs of industry were recognized and the aim was to attract and encourage the best type of modern factory construction on sites equipped with light, power, drainage, and traffic facilities, so that well-arranged and healthy workshops might increase efficiency all round. And with such aims went the provision of good homes for workpeople, so that they might live under pleasant and healthy conditions within walking or cycling distance from their work. On these guiding principles the town was established, and by means of them it prospered. Its elevation and aspect, its proximity to London, its railway services, and its freedom from restricting conditions, provided natural and mechanical opportunities, the full benefits of which the enterprise of its promoters has secured for present and future industrial purposes. The town offered its own water, gas, and electricity supplies from works equipped with modern plant, to meet a regularly increasing demand, and all public services were well constructed and economically maintained. The town also enjoyed good county schools, lighting, fire protection, refuse collection, recreation grounds, and other amenities. At first, of course, there was nothing; the services had all to be brought into being, which was the company's task.

The comparatively low rates at Letchworth were, at the start of its development, a factor in its industrial growth. In 1915, for instance, they were 5s. 9½d. in the £, including county, district, poor, and parish rates. With an additional 4d. in the £ for sewage disposal the total rates were 6s. 1½d. per annum. After the first war the rates of course increased, and at 1925 stood at 12s. 6d. The current (1949) rates are 19s. 8d. It should be observed that there are no other rates levied in the town.

It was pointed out by the company to prospective manufacturers that the constitution of the company was a factor to be taken into account in connection with future rates. 'Eventually they (the rates) should benefit by the profits of First Garden City Limited (the freeholders who are developing the town), as the balance of profits from ground rents, gas, electricity, water, etc., after paying 5 per cent on the company's share capital is, by the memorandum of association, to be devoted to the benefit of the town or its inhabitants' (circular issued to manufacturers, 1914). This was no more than the prospect of a future benefit and the extent to which it influenced industrial firms may

be regarded as negligible. All the same, it is of importance in the long-term prospects of the town as an industrial centre.

The fact that the development of the town and the building of cottages and houses was actively encouraged by First Garden City Ltd., and not left to haphazard enterprise, was a great advantage to industrialists. It was claimed that there was no town in England where more care had been taken to house the workers economically and healthily, or where there were such well-developed means for increasing the supply of cottages to meet an increasing demand. The cottage building undertakings were also limited in dividend, so that the industrialist was assured not only that any profit from the land, gas, water, and electricity in the town over 5 per cent would be used for the public benefit and economy, but that the limitation of profit extended to housing his work-people as well. This was of importance though it required some imagination and long-sightedness to perceive; as a result of subsidized municipal housing there has since been cheap housing elsewhere; but the town still holds a position that should prove increasingly favourable as time goes on.

#### § 4

The following is a list of the Letchworth manufacturers under their trades:

*Adhesive Papers:*

Samuel Jones & Co. Ltd.

*Advertising Tape:*

British Standard Tape Co.

*Baby Carriages:*

Marmet Ltd.

*Belts and Bituminous Paints:*

Mastic Roofing & Paving Co.

*Chemicals:*

Messrs Boake Roberts & Co. Ltd.

*Corsets:*

The Spirella Company of Great Britain Ltd.

*Costume Manufacturers:*

H. Martin & Co.

*Cycle and Motor Cycle Components: \**

Chater-Lea Manufacturing Co. Ltd.

*Electrical Fittings and Appliances:*

Electrical Rewinds (Letchworth).

H. A. (Sales) Ltd.

Hume Atkins & Co. Ltd.

*Embroidery:*

Lewis Falk Ltd.



*Engineering:*

Aldic Engineering Co. Ltd.  
Brilock Equipment.  
British Bundy Tubing Co.  
Challand Ltd.  
Clarke Ellard Engineering Co. Ltd.  
Cooper Stewart Engineering Works.  
Davis Precision Tools Ltd.  
T. H. Dixon & Co. Ltd.  
Engineering & Metals Co.  
Ewart & Son Ltd.  
Furmston & Lawlor.  
Green & Nickels.  
Hands (Letchworth) Ltd.  
Herle-Whitley Ltd.  
Irving Air Chute of Great Britain, Ltd.  
K. & L. Steelfounders & Engineers Ltd.  
Kingswood Manufacturing Co. Ltd.  
Letchworth Casting Co. Ltd.  
Letchworth Heath Treatment & Hardening Co.  
Letchworth Plating Co.  
Letchworth Sheet Metals Ltd.  
Lloyds & Co. (Letchworth) Ltd.  
Matthew Donald Engineering Co. Ltd.  
Morse Chain Co. Ltd.  
Shelvoke & Drewry Ltd.  
Shirtliff Bros. Ltd.  
Leo C. Steinle Ltd.

*Farm and Garden Requisites:*

Country Gentlemen's Association Ltd.

*Food Products:*

Golden Block Ltd.  
Letchworth Bacon Co. Ltd.  
Machine Foods Ltd.

*Furniture:*

D. Meredew Ltd.

*Laundry:*

Letchworth Economic Laundry Ltd.

*Lenses:*

Clement Clarke Ltd.  
Hanwell Optical Co. Ltd.  
Kryptok Ltd.

*Locks:*

Nico Manufacturing Co. Ltd.

*Matches:*

Anglia Match Co. Ltd.

*Oiled Silk:*

Oiled Silk Industries Ltd.

*Office Appliances:*

British Tabulating Machine Co. Ltd.

*Paper Folding Machines:*

Camco (Machinery) Ltd.

*Photographic Papers:*

Kosmos Photographics Ltd.

*Printers:*

J. M. Dent & Sons Ltd.

Garden City Press Ltd.

Letchworth Printers Ltd.

Loxley & Co. Ltd.

Multicolor (London) Ltd.

St. Christopher Press Ltd.

*Rubber Manufacturers:*

Herts Rubber Co.

*Scientific Instruments:*

Foster Instrument Co. Ltd.

Sigma Instrument Co. Ltd.

*Stationers' Sundries:*

W. C. Bowry & Co.

*Timber Merchants:*

J. T. Stanton & Co. Ltd.

J. Sutcliffe (Timber) Ltd.

The variety of the industries is an interesting feature and adds considerably to the economic strength of the town and should greatly assist in its future development. Some of the businesses are small, employing but a handful of people; one employs as many as 1,000. There are in addition to the firms named a number of small workshops. A considerable amount of export trade is done by the Letchworth manufacturers, among the goods exported being: baby carriages, books, corsets, wireless apparatus, motor vehicles, steel castings, lenses, furniture, embroidery, geysers, scientific instruments, etc.

There are some changes in the above list from that published in the first edition of this work. Nineteen names of firms in the 1925 list have disappeared from the original total of forty-one, a few because the firms have changed their names, but most have vanished because the firms have gone out of business. This, of course, is a necessary feature of economic life, for industry is not static, it moves, changes, and transforms itself, firms rise and fall, demands alter, processes are improved, and one man fails while another succeeds, all of which is part of the healthy development of an economy. There are more than thirty new names in the list, some of them representing important activities. These changes are matters to be allowed for in the development of a town's industrial life.

It cannot be said, of course, that the location of industries at Letchworth has anything to do with industrial planning in a national sense, except in so far as industries are affected by the location of industries activities of the Board of Trade. Letchworth itself is planned, but its relation to the country and to industry in the country is not planned; industries come to the town by chance or personal whim or some unknown cause. Thus the industries of the town are not balanced with each other. There are

no compensating factors, except those that exist by accident. This is of importance, and points to a fundamental defect in national economy, which the above-mentioned activities of a government department does little to remedy. Letchworth does its best, it shows the way; but it is at the mercy of the unorganized and fitful operation of what we call an economic system.

## § 5

Most of the industries came from other towns, mainly London; but it is worthy of note that the largest of them were new businesses, notably the Spirella Company, Marmet, and Kryn & Lahy. The Spirella Corset Company was an offshoot of an American business and was first established in temporary premises in 1910; its growth was rapid, its present factory is a distinctly handsome building and adds to the architectural interest of the town. The firm made a feature of employees' welfare, and conducted a canteen when such activities were novelties, also a library and baths, provided facilities for sports clubs of every kind, and built a large hall for social purposes.

The Marmet baby carriage works was started in 1913 in a small temporary building with a total staff of twelve. In 1921 a new factory was erected, which has since been twice extended, and the company claims to have one of the largest and most up-to-date baby carriage works in the kingdom.

The effect of the first war upon the town's industrial life was considerable. One large new engineering industry was established, mainly to give employment to Belgian refugees and their families who were brought to the town. The steel foundry has remained, and is one of the town's largest industries, though the original Belgian workers were repatriated.

Among the industries adversely affected by the first war were the printing and book-binding works of W. H. Smith and Son, in which the town as well as the firm had taken a good deal of pride. When the war started the business was seriously disturbed, with the result that it was re-transferred to London, where the firm had just completed a new large factory. The loss of these industries was a blow to the town. Though the employees had been extremely reluctant to come to Letchworth, for it had then but few of the attractions of town life, and the cottages were not liked because they were different from London houses and tenements, yet, after eight or nine years' experience of the garden city, they had come to appreciate the amenities of the town so greatly that when it was decided to return to London they united in the endeavour to induce the firm to alter its decision. That, however, was not considered possible, and the factories were disposed of to other firms; some of the workpeople returned to London, but many stayed in the town, getting other work in the district, or taking up other occupations, while a few formed themselves into a small bookbinding company.

The second war had effects no less momentous than the first. The town became a reception area, and was quickly overcrowded. Some firms with London offices moved their staffs to Letchworth, and carried on their business from there. A part of this



decentralization of administration continues, for it was found convenient. There was little new building, but a number of London firms moved their activities temporarily to the town. Firms engaged on government work were glad to find accommodation at Letchworth and regarded themselves as fortunate to become established there. The total effect of the war was to hold up industrial development, to prevent expansion, and to delay the growth of the town.

## §6

With a view to getting the opinions of the industrial firms upon the town as an industrial centre, the writer put four questions to each of the firms operating there. The answers that were received are printed below:

### (1) Reasons for coming to Letchworth?

Our lease expired in London. Letchworth offered good terms for building and facilities for housing for employees. *British Tabulating Machine Co. Ltd.*

Because after exhaustive inquiries we found that the first garden city offered better arrangements for building us the factory we required for our particular needs. *Camco (Machinery) Ltd.*

We moved to Letchworth as we had outgrown our London factory and we decided that the time had arrived when we should construct modern factory premises in a less congested area.

*Chater-Lea Mfg. Co. Ltd.*

It was our home town. *Davis Precision Tools Ltd.*

We came to Letchworth because we could get more room and a better life for our employees than in London. We are certain that we have given their lives a better chance altogether, especially in the fact that we have at least doubled their hours of leisure, as they are close to their employment and save a fearful waste of time in travelling. *J. M. Dent & Sons Ltd.*

This business was removed here from Stratford in the year 1921 so that the firm, as engineers, might take an active part in the industrialization of the district, and particularly for the purpose of equipping the large factory which was built at Baldock, with the intention of devoting it to the manufacture of sensitized photographic materials. *T. H. Dixon & Co. Ltd.*

Our firm came to Letchworth when the garden city was first started as the then proprietor was a friend of the late Sir Ebenezer Howard. *Lewis Falk Ltd.*

Reasonable and healthy working conditions, and low ground-rent, with room for expansion of works. When we decided to come to Letchworth to establish this business, Hitchin, the next station towards London on the L.N.E.R., was a junction at which the main line trains going north almost invariably stopped. The first stopping place for the fast trains now is Peterborough, so that the convenience for travelling north is not quite so good, but this does not throw the balance against Letchworth. *Foster Instrument Co. Ltd.*

As manufacturers of a first-class food product, it was important to be operating in an area where the atmosphere was sweet and clean, a condition which was assured by the lay-out of this garden city. *Golden Block Ltd.*

Letchworth was an ideal spot to start a business, as the conditions were admirable for all. *Hands (Letchworth) Ltd.*

Because attractive rates, coupled with reasonable wages, were available, together with the possibility of renting floor space in a tenement factory or small separate factory, with a further opportunity later of purchasing a small factory outright, or building on available land.

*Hume Atkins & Co. Ltd.*

Our primary reason for coming to Letchworth in the first instance (twenty-one years ago) was its close proximity to the Royal Air Force station at Henlow, where all experimental test drops of parachutes were, and are, made. *Irving Air Chute Ltd.*

When this company was started in 1936 the three founder directors lived in Letchworth and it was, therefore, the obvious place in which to open. *Jigs (Challand Ltd.).*

Letchworth was selected as a site owing to its proximity to London, because suitable land, water, gas, and electricity services were readily available, and at that time there was ample housing accommodation for workers. *K. & L. Steelfounders and Engineers Ltd.*

Cheaper factory rent than in the city. *Kryptok Ltd.*

We were established at the very beginning of Letchworth. *Letchworth Printers Ltd.*

Better and more suitable accommodation was available. *Lloyds & Co. (Letchworth) Ltd.*

There were facilities offered for establishing an industrial undertaking in more healthy and congenial surroundings than were possible in London. *Marmet Ltd.*

We came to Letchworth for the business contacts we were able to make in the area.

*Matthew Donald Engineering Co. Ltd.*

To procure better working conditions for everybody. *D. Meredew Ltd.*

The reasons for our coming to Letchworth were that in 1919 our London works were not large enough to cope with the increasing demand for our products and at that time there was a factory in Letchworth available for our purposes. We are now extending that factory as after twenty-seven years we are not inclined to make a fresh start elsewhere. *The Morse Chain Co. Ltd.*

Originally we intended having a factory in London, but at the time suitable premises were not available. Consequently we chose Letchworth, for we saw possibilities in this garden city, and hoped that we should find the question of labour an easy one. *Multicolor (London) Ltd.*

We came to Letchworth in 1932, primarily because of the proximity of Letchworth to London and the Continent, the availability of labour, and the fact that a suitable industrial building was available for rent. *Nico Manufacturing Co. Ltd.*

Suitable type of factory for our purpose and, at the time of coming here, good train service with London. *Oiled Silk Industries Ltd.*

The reasons for establishing the present business in Letchworth was the fact that the managing director was previously manager of the works of the Lacre Motor Company then operating in Letchworth, so that both he and members of the staff were already resident in Letchworth and there was a suitable factory available with plenty of room for expansion. The managing director was known in the district, banking facilities were available, and, actually, there was no reason to seek elsewhere for a better site for the business. *Shelvoke and Drewry Ltd.*

The reason this company came to Letchworth was that the founder, Dr. J. G. Stewart, moved from Stratford-on-Avon because he considered that Letchworth was a healthy town, and in addition he thought it was a more industrialized area than Stratford-on-Avon.

*Sigma Instrument Co. Ltd.*

Because of the opportunity afforded to provide the best possible conditions for workers.

*The Spirella Company of Great Britain Ltd.*

It was a convenient distributing centre for building industry materials.

*J. T. Stanton & Co. Ltd.*

(2) Has your experience of Letchworth as an industrial centre been satisfactory?

Generally speaking our experience has been that the Letchworth set-up has been satisfactory up till now, but we, in common with other manufacturers in Letchworth, are running into serious difficulties. These are dealt with in the answer to question 4.

*British Tabulating Machine Co. Ltd.*

Undoubtedly, yes. *Camco (Machinery) Ltd.*

Our experience of Letchworth as an industrial centre has been entirely satisfactory.

*Chater-Lea Mfg. Co. Ltd.*

Fair. *Davis Precision Tools Ltd.*

Generally yes. It would have been more satisfactory had Letchworth been ten miles nearer London. As a self-contained industrial centre of manageable size, Letchworth is highly satisfactory and excellent proof of the idea of satellite towns. Its distance from London does not count against it as a production centre, and only in our case does it do so as a distribution centre because of the various and often topical nature of our products, which call for distribution in small urgent parcels. *J. M. Dent & Sons Ltd.*

Our experience of Letchworth as an industrial centre has been entirely satisfactory.

*T. H. Dixon & Co. Ltd.*

Owing to the geographical situation of this new town there has been a scarcity of labour practically from its inception, which has become more acute at Letchworth than in any other spot in the United Kingdom. *Lewis Falk Ltd.*

Yes, on balance of considerations. *Foster Instrument Co Ltd.*

Supplies of industrial power were guaranteed by the fact that the First Garden City Ltd. had their own gas manufacturing and electric generating stations. In the present emergency that fact has exempted Letchworth from the standstill which applied to all the rest of the south-east area, and has proved a factor of incalculable value to Letchworth industrialists. *Golden Block Ltd.*

No. *Hands (Letchworth) Ltd.*

Yes. *Hume Atkins & Co. Ltd.*

It is our opinion that Letchworth is satisfactory as an industrial centre. *Irving Air Chute Ltd.*

Up to the war period we were satisfied, but, at the present time, Letchworth is probably the most overcrowded town in England. Industrial expansion and location of new works here during the war has caused the housing accommodation to be completely outstripped. Letchworth is now an unbalanced town—over 50 per cent of the labour employed here coming from outside districts, Hitchin, and Stevenage. *K. & L. Steelfounders and Engineers Ltd.*

We have no reason to complain. It is easy to transact business here as neighbouring firms assist one another. *Jigs (Challand Ltd.)*

Not altogether; skilled lens workers prefer the amenities of a large town, and country folk are difficult to train. *Kryptok Ltd.*

Most decidedly. *Letchworth Printers Ltd.*

Healthy congenial housing and surroundings; town amenities combined with rural advantages; healthy, happy workpeople; good rail and transport facilities, not too far from midlands for raw materials; adequate, cheap electricity supply from First Garden City power station.

*Lloyds & Co. (Letchworth) Ltd.*

Entirely satisfactory. The supply of essential services, gas, electricity, and water from the First Garden City Ltd., could not have been excelled. The reasons for our coming are completely justified by the health and well-being of our workers and the absence of public-houses means no absenteeism or bad time-keeping due to this cause. *Marmet Ltd.*

We say definitely it is satisfactory. *Matthew Donald Engineering Co. Ltd.*

Although there is practically no supply of labour in this district, this means almost all of it has to be trained, but given labour there is good prospect of retaining it, which does not so easily obtain in big centres. *D. Meredew Ltd.*

Generally speaking our experience of Letchworth as an industrial centre has been satisfactory, but latterly, of course, we have suffered by an over-industrialization of the town. Too many



factories have been erected without any corresponding increase in housing. Letchworth is somewhat remote from the steel manufacturing districts and therefore any firm of engineers is, to some extent, handicapped. Also since the withdrawal of the London, Midland, and Scottish Railway from Hitchin we have been entrusted to the tender mercies of one railway company with somewhat unfortunate results in regard to delivery periods for traffic in and out, although road transport has, to some extent, helped to balance the railway's shortcomings. *The Morse Chain Co. Ltd.*

Unfortunately our experience has been that labour is not easy. Most of the labour has to be brought into this place and public services are not what they should be. *Multicolor (London) Ltd.*

On balance, yes. *Nico Manufacturing Co. Ltd.*

No. Mainly due to the fact that the labour in this area is not all that could be desired.

*Oiled Silk Industries Ltd.*

Our experience of Letchworth as an industrial centre has been, on the whole, quite satisfactory. In the earlier days employers who were tenants of the First Garden City Ltd. were subjected to many annoyances, which, however, ceased when the directors made an alteration in the management. *Shelvoke & Drewry Ltd.*

Our experience of Letchworth as an industrial area has been completely satisfactory; the size of the town enables the various firms to be well acquainted with each other and a very helpful spirit exists between the various industrialists. *Sigma Instrument Co. Ltd.*

Yes, because of the many advantages of a self-contained community, and the opportunities of benefiting by the blessings of nature. *The Spirella Company of Great Britain Ltd.*

Yes. *J. T. Stanton & Co. Ltd.*

(3) Can you indicate the advantages you have found in Letchworth as an industrial centre?

Letchworth has, up till now, given us the industrial facilities we needed, namely, adequate space for expansion, reasonable labour force suitably housed, adequate water, electricity, and gas supplies, and reasonable communication and transport facilities with London and the midlands.

*British Tabulating Machine Co. Ltd.*

For industrial purposes, Letchworth provides adequate services at reasonable rates. The recent crisis has proved this 100 per cent. *Camco (Machinery) Ltd.*

Most of our employees live near their work and have more leisure than in London because of the time saved in travelling. Gardens and allotments provide popular and healthy recreation, and contribute to food supplies. Its better living conditions was our main reason for coming. While the community spirit is not so much in evidence to-day as the earlier days, the tendency is more than ever in the direction of communal life. This is all to the good. *J. M. Dent & Sons Ltd.*

The advantages are the pleasant living conditions in a town planned for those conditions and the accommodation for industries within easy reach of the employee's home. *T. H. Dixon & Co. Ltd.*

Given equal geographical advantages as to climate, soil, etc., there can be no question that the small town is much healthier, and to that extent it must increase the efficiency of production of a factory, although it is very difficult to trace that effect and to quote chapter and verse. One must base the assumption of increased efficiency on common sense, because it is difficult to get a direct comparison with London. The fact that the majority of employees can live fairly near the factory, so that the time occupied in going to and from the factory is short, and that they are not at any expense is, of course, a positive advantage. In relation to our particular business, this does not react directly to our advantage, because the rates of pay are approximately the same as in London. The majority of the employees are able to go home to their midday meal which, on the whole, is an advantage, though I believe that with some young married couples the fact that this necessitates the wife staying in the house at midday is not altogether appreciated by her. A man with a family finds it probably an entire benefit, except that during the present rationing period if an employee

stays to a meal at the factory he gets extra food. The employee does spend less time away from his home in work and travelling, and has more time for leisure. Theory would indicate that it was desirable for some of this extra leisure to be devoted to technical or general education, but experience shows that it is not so, except so far as a minority are concerned. There is a definite advantage in the working time of the factory office as compared with the office in, say, central London, where the common experience is that the office is not in full swing until 10 a.m., and begins to empty at 5 p.m. For the same length of time away from their homes, the office staff in Letchworth can work from nine until six. Against this advantage may be set the fact that communications with customers and suppliers more frequently involve the expense and delay of trunk calls than when the factory is in a large city. In a large city, for such a business as ours, there would be quite an appreciable amount of local business, which could be done at small selling expense; in Letchworth the amount of local business is almost negligible. With regard to the supply of labour. So-called unskilled adult labour is obtainable in an isolated garden city by drawing from the surrounding agricultural districts. Skilled adult labour has always to be imported, for such a small manufacturing town does not have many firms employing the same class of labour, and, in any case the shifting about of that labour from one local firm to another is not, as a rule, desirable either for the employee or employer. With regard to the imported skilled labour, any unmarried man is fairly easily persuaded to come to Letchworth, but is liable to find it dull because it has not the available amusements of a large city, so that he may drift away in the winter. For a married man with a family, a move, say, from London, is a big undertaking, and cannot be easily achieved without some form of assistance or guarantee from the employer. The employer, once having got the man to Letchworth with his family, is under some amount of moral obligation to keep the man on, even though he should prove unsatisfactory. Of course, the present shortage of housing is a general difficulty. One important result, in my business, from the foregoing considerations, is that my employees are largely recruited from the boys and girls leaving local schools, and in Letchworth we are fortunate in having skilled management, which does produce and select a considerable proportion of promising youngsters. The senior staff and selling organization of a manufacturer will of necessity have to make frequent visits to the nearest large manufacturing town (London in our case). As compared with a factory, say, in a London suburb, Letchworth is at a disadvantage in this respect, the return journey involving approximately, an hour longer. *Foster Instrument Co. Ltd.*

During the war, one of the great advantages of being in Letchworth was that, almost every kind of light industry being represented in the town, if a manufacturer became unstuck in any of his departments, he could almost certainly rely on a near neighbour being able to help him out of his difficulties with a speed which would be hard to imagine in a larger and less neighbourly community. *Golden Block Ltd.*

None. *Hands (Letchworth) Ltd.*

The labour available is of a good type, and steady. The benefit of a small-town outlook, with the knowledge that people have of each other and their willingness to co-operate, has proved a very distinct advantage, operating amongst mixed factories, and in emergencies services and materials can be called on from what amounts to a voluntary joint pool. *Hume Atkins & Co. Ltd.*

One of the possible advantages of Letchworth as an industrial centre is the fact that all the public utilities, electricity, gas, and water, are run by the First Garden City Ltd., and therefore it is a self-contained town. This was particularly brought to our attention at the time of the recent coal crisis, as the reserve of coal at the local power station was sufficient to have enabled us to carry on during the whole period of the crisis at normal working hours, had the Government allowed us to do so. *Irving Air Chute Ltd.*

Due to the situation of the town it is possible to get to London quite quickly, and although London is only thirty-five miles away, the factories are well sited in open country, the factory area being confined to one part of the town. It is therefore pleasanter and more hygienic to work in such surroundings. The worker is also better able to enjoy his leisure and recreation as most employees do not have to travel far from their homes. *Jigs (Challand Ltd.)*



Labour shortage is acute, and will not be rectified until very much greater expansion of housing takes place. Otherwise Letchworth is a good site for the steel foundry and engineering works located here, as it serves to supply steel castings and heavy engineering products to the surrounding industry and users. It has one of the only two steel foundries of any size in the south of England. It is a convenience to nearby large engineering works to have a supplier of steel castings with whom they can maintain easy contact. Most of the raw material for steelmaking (i.e. scrap steel) arises in the neighbourhood, and electric power for melting is drawn from the local power station at a reasonably economic figure. While the figure for electric power is somewhat higher than in districts where heavy industry predominates, this is compensated for by utilization on the spot of steel scrap which would otherwise incur heavy transport charges to the north of England.

*K. & L. Steelfounders and Engineers Ltd.*

The chief advantage from our point of view is the great variety of industries. This means, of course, the very steady and reliable flow of business from the different trades. If some are slack others are almost certain to be busy. *Letchworth Printers Ltd.*

Just the right distance from London; only just off the Great North Road, and near Hitchin on one of the main railway lines from London to the north. *Marmet Ltd.*

The big advantage found in the town is the high percentage of skilled labour available.

*Matthew Donald Engineering Co. Ltd.*

As most of our customers are not in the vicinity it is fairly central for us. Many of our workers can live near their work but many more would do so if they could. Owing to the multiplicity of works here it is seldom any industrial blitz hits all of them at once. *D. Meredew Ltd.*

As regards any advantages we have found in Letchworth as an industrial centre, we may say that in 1919 housing was good, there was no overcrowding, and there was little competition for houses from within a twenty-mile radius, whereas now housing is appalling, there is terrible overcrowding. Letchworth serves as a dormitory to some extent for London, and also as a home for workers who travel to Luton, Stevenage, Royston, and Hatfield. The roads are no longer suitable for the amount of traffic to be carried and require drastic reconstruction in many parts of the town. The rating valuation and the poundage have leaped up, and we ourselves feel that sufficient value is not being given either by the county or by the district council. We fear, too, that while electricity supplies for manufacturing purposes are ample and on the whole at reasonable rates, with nationalization of the garden city company's power station, manufacturers will be involved in higher costs and far less efficient service, and similarly with gas supplies.

*The Morse Chain Co. Ltd.*

The surrounding country is very attractive and the place is extremely healthy.

*Multicolor (London) Ltd.*

The main advantage we have found is that we have been able to draw on agricultural labour.

*Nico Manufacturing Co. Ltd.*

There are no advantages but innumerable disadvantages. *Oiled Silk Industries Ltd.*

Among the advantages which Letchworth presents as a manufacturing town are: easy access from London, availability of supplies of electricity, gas, and water, and the fact that workmen of the best type are attracted by the local amenities, and desire to remain here. They find the place to be healthy for their families and many of them adopt for the first time gardening as a hobby, which gives them a continuing interest in their place of residence. As an example, more than seventy of our men have been in our employ for more than twenty-one years, and in numerous instances their sons are indentured to us, to the improvement of the relationship between them and us. Letchworth certainly appeals to the average workman and circumstances produce a better understanding than is possible in the average manufacturing city. *Shelvoke & Drewry Ltd.*

In the writer's opinion a small town such as Letchworth is preferable to large cities such as London and Birmingham because there is not the same likelihood of firms of a competitive character operating in the same town, and there is not the same transfer of labour, which occurs in big cities, so that the industrial life tends to be on smaller and, in the writer's view better, scale, than is found in large towns. *Sigma Instrument Co. Ltd.*



The chief advantages of the garden city are the community services provided by the garden city company, which are equal, if not superior, to those of almost any area. These services include electricity, gas, and water, all of which are maintained at a high level of efficiency. Educational facilities are at least comparable with any other locality and can be improved as the town develops. The planning of the community providing as it did for residential and industrial areas, with plenty of open spaces for recreational purposes, well planned streets, and suitable regulations for all kinds of buildings, which enforce proper ventilation, sanitation, and lighting, has been proved to be for the benefit of every resident. Evidence of the value of the services provided by the garden city company was provided during the recent fuel crisis. Purely from an industrial point of view we find that there is opportunity for closer individual touch with the worker, with the result that there is better understanding and co-operation as between employer and employee than possible in thickly populated areas. *The Spirella Co. of Great Britain Ltd.*

Industries are grouped in one area, which is useful from a service point of view, especially when one industry supplies raw materials or components to others. *J. T. Stanton & Co. Ltd.*

(4) What are the improvements needed in Letchworth from a manufacturer's point of view?

The difficulties we are now running into are: shortage of labour, deterioration in rail transport and deterioration in road transport. The reason for these are firstly the competition between firms in Letchworth for the limited amount of labour available and the impossibility of bringing more labour in from outside in view of the extreme shortage of houses. This situation is not likely to be remedied for a number of years and points to the fact that in setting up an industrial centre of this kind due cognizance must be taken of the fact that industry is never static and full provision must be made in the initial plans to cater for inevitable expansion and the consequent increased demands for labour, and also for the services and amenities which such labour will need. All these arise in some measure from the great increase in industrial activity in Letchworth, but are also caused by the increased industrial activity in adjacent areas. Since the initial development at Letchworth, industrial growth has come about in the neighbouring towns of Hitchin, Stevenage, Baldock, Knebworth, and Welwyn. The planting of a very large industrial town at Stevenage, which is only five miles from Letchworth, cannot but aggravate the situation, and would, on the face of it, appear to be the essence of bad planning. Stevenage cannot but affect industry in Letchworth, and may easily lead to a gradual linking up of the area into one rather shapeless mass of industry involving all the above-mentioned towns, and we may have a situation akin to what has happened in the midlands and in Lancashire. While the satellite town idea is a good one, it is surely wrong to place one in close proximity to other satellite towns already established. The whole idea should be to disperse rather than to concentrate. *British Tabulating Machine Co. Ltd.*

A communal centre with a central hall providing seating accommodation for up to 750, and dancing for 400. Attached thereto should be rooms for meetings for all the varied activities of the town, social, vocational, educational and sporting, masonry, etc. It should also have attached clinic and welfare centres. A good-class hotel in the town's centre, where other refreshments should be as readily obtainable as intoxicants. A sports stadium with provision for football, cricket, athletics, tennis, etc. An internal bus service to replace the present ineffective one. To-day it takes over half an hour to walk from one side of the town to the other. *Camco (Machinery) Ltd.*

Cheaper rates and more freedom. *Davis Precision Tools Ltd.*

Better transport services both local and between Letchworth and London. More houses—both artisan and the better class of house, but not for use as dormitories. A technical institute to cater for the major industries, and a small theatre. Letchworth has become embarrassingly successful as an industrial town. The need now is for housing, schools, shopping, and transport programmes to catch up with the factories. *J. M. Dent & Sons Ltd.*

We are of the opinion that the normal development of the town as originally intended will provide all the facilities we require, and the particular requirements to that end are more housing and still better transport facilities for employees to travel to and from Letchworth and the surrounding district. *T. H. Dixon & Co. Ltd.*

In Letchworth itself there are few improvements that can be suggested as practicable, but several points occur to me that have bearing upon plans for other garden cities, some of which are as follows: (1) Do not allow planners who are hostile to motor cars to lay out narrow roads with sharp corner intersections with the mistaken idea that if they make driving difficult for the motorist they will make it safer for the pedestrian; (2) lay out wider roads, particularly in shopping and factory areas where people must or will park on the roads; (3) do not site your garden city near enough to London or any other big city for it to be used as a dormitory; Letchworth suffers from this and the projected new Stevenage is absurd; (4) provide in the original plan for shopping facilities and general amenities sufficient to compete to some extent with the big city. The young people will not come to or stay in a community which has little to offer in the way of entertainment. Welwyn Garden City shows an advantage in shopping over Letchworth; (5) finally, the overriding reason for planning garden cities is because big cities have become unmanageable. The whole country has got very much out of balance as between the town dweller engaged in manufacturing, etc., and the lamentably undermanned and under-developed agriculture. Our expected decline in population may tend to rectify this. *Foster Instrument Co. Ltd.*

The main improvement required in Letchworth is the replacement of its urban district council by men of business experience and political independence, to encourage improvements on the basis of a real present demand. *Golden Block Ltd.*

The whole tendency has been to increase the manufacturing facilities, without, at the same time, increasing the housing facilities. My opinion generally, after coming from an industrial centre (Birmingham), is that I should never again start any business in a satellite town until I was assured that provision for ample housing accommodation and general facilities and amenities had been made. The labour position to-day is very bad. In our own case, we have had expensive machines lying idle for over six months, with no likelihood of them running. Personally, I love Letchworth and think it is an ideal town to live in. Perhaps when—if we ever do—get houses, it will improve as a place in which to have your works. *Hands (Letchworth) Ltd.*

There is a restriction due to the small size of this town which does not enable it to offer certain social facilities, i.e. theatres, commercial stationers, good quality professional consultants, or sufficient scope for economically, and thus competitively, run 'feeder' industries, i.e. foundries, pattern makers, tool makers, accessories suppliers, etc. *Hume Atkins & Co. Ltd.*

There is a great shortage of accommodation for the workers, which automatically creates a great shortage of workers. *Irving Air Chute Ltd.*

The most important point to us is floor space or rather the lack of it. To overcome our own difficulties we require much more floor space and, as soon as it is possible, more compact factories should be built in the town. *Jigs (Challand Ltd).*

The major improvement needed—which transcends any other need—is sufficient housing to accommodate the people who are employed here. Letchworth is a most desirable town from the worker's point of view, and very few people who come to live here from other districts would like to leave. The total absence of slums, the excellent open spaces, playing grounds, and the general higher standard of health appeal to workers. The tone of the town, in almost every respect, is notably higher than the tone of other industrial towns—particularly those in the north of England.

*K. & L. Steelfounders and Engineers Ltd.*

An hotel fully licensed, centrally situated, somewhat similar to the 'Cherry Tree' at Welwyn, also a repertory theatre centrally situated, and a better train service. *Kryptok Ltd.*

Better rail service, both goods and passenger. *Letchworth Printers Ltd.*

(1) More houses for workpeople at low rental.

(2) Especially more houses for skilled and administrative staffs at medium rentals.

(3) A decent residential, commercial hotel, for the accommodation of visitors and commercial travellers, etc.

(4) A licensed public-house. *Lloyds & Co. (Letchworth) Ltd.*

The only present improvement needed is more housing accommodation for workpeople.

*Marmet Ltd.*

From our point of view the greatest improvement necessary is houses for our employees.

*Matthew Donald Engineering Co. Ltd.*

More ample provision for housing workpeople. A technical school; one was planned in 1938 but its prospects are still in the air. *D. Meredew Ltd.*

If only sufficient houses could be built, we feel that more people would come to live here and this would improve conditions all round. *Multicolor (London) Ltd.*

The improvements we should like to see are more houses and better local transport facilities. The only specific advantages we see for locating industry in Letchworth are the better standard of housing in the area, and a congenial climate. *Nico Manufacturing Co. Ltd.*

There are many improvements that are desirable, particularly as regards the shopping centre, made worse by rationing conditions and quotas for foodstuffs, etc. No licensed premises of any description other than so-called clubs is a present disadvantage, but what is more important is the local council's inability to adopt broadminded principles. *Oiled Silk Industries Ltd.*

Improvements which can be suggested are, of course: (a) a better supply of houses; (b) improved transport, both local and the London train service; (c) more competition among the shopkeepers, which would lead to a better service to the population and; (d) a little more interest and anxiety to help their tenants on the part of the First Garden City Limited.

*Shelvoke & Drewry Ltd.*

The improvements required in Letchworth at the moment are better housing facilities for the persons already employed in the town and a better train service, preferably electric, to the metropolis. *Sigma Instrument Co. Ltd.*

(a) More and better housing conditions in order to attract a larger number of people, but more particularly workers. Industry is seriously handicapped by the lack of sufficient labour.

(b) Improvements in railway services, both passenger and goods, more particularly better passenger accommodation. An electric service between Letchworth and London would be welcome.

(c) The return of a head office postal service in Letchworth, as it is now located at Hitchin.

(d) The building of a good-class fully licensed hotel near the centre of the town.

*The Spirella Company of Great Britain Ltd.*

A first-class hotel centrally placed for the use of buyers and business people who come to Letchworth. An assembly hall or halls for meetings. In planning and running Letchworth, housing accommodation should have kept pace with industrial capacity. Housing for those employed in industry has to our knowledge always lagged, a serious handicap to any town, especially Letchworth. Letchworth is an excellent town in other respects, and has demonstrated the soundness of those principles for which it was founded. *J. T. Stanton & Co. Ltd.*

These replies are worth careful study. The answers given to the same questions in 1925 were not very different from what is said above. Nearly all ask for better railway facilities, and it can be taken as certain that all, without exception, would agree that a better railway service, both passenger and goods, is urgently required. The passenger service in particular has greatly deteriorated. It may be supposed that however good such facilities might be, and however low the charges, firms would still wish them better and lower; but in this as in other respects the position at Letchworth is such that the town may be said to have been established despite forces that if not hostile to it were by no means actively helpful. The demand that is indicated for improved postal services is of the same nature. Neither the railway company nor the postal authorities or any



other public body or service can be said to have taken at any time an active part in encouraging the growth of the town. Demand had always first to arise before response was made to it. This suggests some of the difficulties that the town has had to overcome. The shortage of houses has always existed, and now, of course, is the severest handicap upon industrial efficiency and expansion. There ought to be priority for building in the garden city because of the constructive part it is playing in new industrial conditions. It is not surprising that manufacturers appreciate the saving of time to themselves and their employees of living within a short distance of the place of work. The heavy burden and expense of travelling to work is escaped at Letchworth. That the town will be a better place for industry when it is larger is emphasized. Indeed, many of the labour difficulties that have been and are still being encountered are largely due to the population being too small to provide sufficient social and other advantages to attract labour and keep men and their families contented. The more intelligent workmen almost invariably like Letchworth, especially after they have got accustomed to it, and a large proportion of them undoubtedly appreciate the good houses, gardens, open air, and opportunities for a healthy life; but there are others, especially among the unmarried men, who find the place dull. This deficiency of popular entertainment and opportunities for social life has never been overcome and more active steps to deal with it are necessary. Incidentally this matter brings us to the problem of the relation of the size of a town population to the amenities and social activities that are desired by all classes of people. A town of 20,000 inhabitants is not sufficient for modern needs. This is why a garden city is conceived of as a town large enough to provide the variety of entertainment, sports, and employment that is demanded. Letchworth's ultimate population of 35,000 is probably the minimum that should be aimed at, and it is not a good thing for the town as an industrial centre that the population figure has been cut down by the minister.

All the manufacturers are agreed as to the healthiness of the town and its effect upon the workers. In 1918 a manufacturer who had had some years' experience of the town said at a discussion that took place at a meeting of the local authority:

In Letchworth the health of his own workpeople was so good, and the amount of time that they lost from ill health or other causes was so small, that when he showed his books to friends running works in other towns they did not believe him. At his own works he had had whole weeks during which, with 250 people, the total loss of time had been less than three hours. If this was not caused by the influence of Garden City, what was the cause?

The industrial firms have formed the Letchworth Manufacturers' Association to deal with matters of common interest, and practically all the firms belong to it. The association has no regular meetings or fixed subscription, for there is little expenditure incurred in its running, and a guinea payment from each firm is usually sufficient for several years. Meetings are called when matters of common interest arise. The association has dealt with housing, rating, education, transport, war memorial, staggering of holiday and working periods, fuel economy, etc. Such questions as rates of

pay, conditions of employment, or trade union negotiations are not brought within its scope. The association seems to fulfil a useful function, the importance of which may increase.

### § 7

Sir Patrick Abercrombie's comments in his Greater London Report, 1944, are interesting. He points out that Letchworth's industry 'caters for a much bigger population' than that of the town itself. That, of course, was always the intention, because it was the object of the garden city not only to provide industrial work for its own inhabitants but to bring industry to the countryside. The idea of people working in the town and living in the country is a familiar one, and Letchworth rightly provided the opportunity for such a way of life on a relatively large scale. Sir Patrick's further comments, however, suggest, with some force, that closer attention should be given to the right use of industrial land. There is a tendency for manufacturers to take more land than they need, and such land may remain vacant for a long period. One object with which manufacturers came to Letchworth was to acquire factory sites where there was possibility of extension should their business grow, as they expected. Therefore they took more land than was immediately required, which they were induced to do because it was relatively cheap. There can be no objection to making provision for expected growth though it raises questions that have to be faced. Until the land so acquired is used it ought not to remain derelict, but should be maintained in decent order. Some firms use the land, if the area is sufficient, for sports grounds; but it should certainly be laid out and kept in decent order. Another point is that when the land is built upon, the new factory will make demands upon the town's services, including transport, power, and housing. These are matters to which attention ought to be given before the extension is made, not solely in the interests of the firm concerned, but in the interests of the town. Such attention is now possible, and it should be given.

There are many other matters to which thought has to be devoted in the lay-out and administration of industrial areas, as experience at Letchworth has shown. One is the need for an organized system of dealing with waste products, packing material, disused plant, rubbish, etc. Common practice has been to deposit such things outside the buildings, where they accumulate and become unsightly. Indeed, the immediate surroundings of the factories generally are anything but pleasant. Untidiness is common, grass is usually left uncut, and there is created a feeling of carelessness and inefficiency, which cannot fail to have a psychological effect. Whatever temporary disorder is inevitable should be hidden by walls or fencing; but it should be a matter of pride among industrialists to keep the appearance and surroundings of their factories up to the highest pitch of order. This is partly a matter of lay-out and planning, but largely also an element in good management.

A second matter is the need for making provision for car parking. No factory should be built without a car park for visitors, and none should now be built without

adequate parking accommodation for the cars of workers. Factories have long been accustomed to providing for cycles, though some do it inadequately; they ought to provide for cars. This has direct bearing upon the planning of the industrial area, and indicates the need for the flexibility that plans should possess, and how necessary it is that they should allow for change.

### § 8

The development of industry is the predominant element in Letchworth, and the keynote of its success. It was not easy to get manufacturers to take the considerable risks of moving there in the early days of its history, and those who were bold enough to take the step are to be congratulated upon the part they played in establishing the town. To-day, of course, the position is different. With the current ideas of dispersal, Letchworth is no longer a novelty; but it remains a town with features that to the industrialist other towns cannot rival.



## CHAPTER V

### ITS PUBLIC SERVICES

I see a City being wrought  
Upon the rock of Living Thought.  
It was a bloodless dream until  
It quickened in a good man's will,  
Became a hope, became a vow,  
For one, for many, until now  
Upon the rock of Living Thought  
I see the City being wrought.

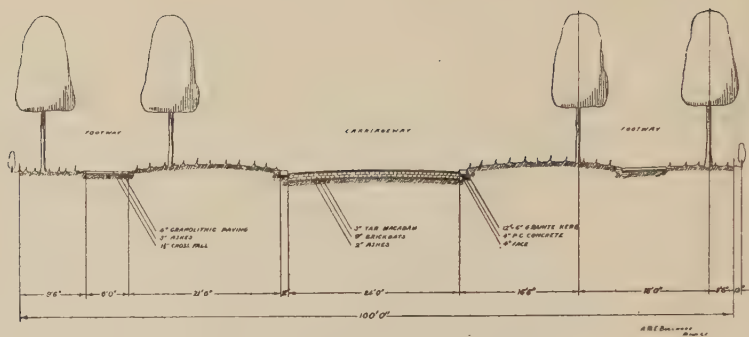
HENRY BRYAN BINNS (Letchworth, 1909)

#### § 1

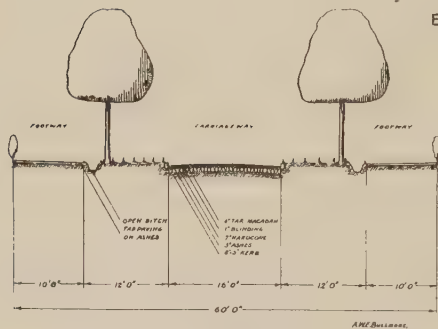
WHEN the Letchworth estate was purchased in 1903 the area was purely rural. There were three lengths of roads belonging to the county council and several unmetalled roads vested in the rural district council; the railway ran through the estate, but there was no station nearer than Hitchin, two and a half miles from the centre, Baldock being about the same distance in the opposite direction. There was no water, drainage, gas, or electricity. The garden city company had therefore to provide all the public services. It had a free hand; for not only was there no authority with any rights or powers over its estate, with the exception of the Hitchin Rural District Council, and to a lesser degree the county council, but the company itself, as owner of the estate in fee-simple, possessed all the rights that were necessary for carrying out the scheme. There was no such thing as town and country planning. In 'rights' the company was rich: it was poor only in resources. The company was subject to the by-laws of the rural district council, but these did not interfere with anything the company desired to do. On the other hand, the company had no special statutory powers beyond those that every owner of land enjoyed. The garden city company therefore, as it was bound to do, constructed the roads in accordance with its town-plan, designed and laid down its own sewerage system, and constructed water, gas, and electricity works.

#### § 2

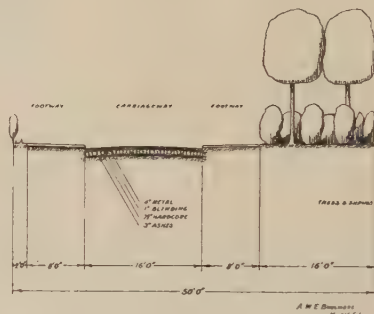
The framework of a town's structure is its highways, for they are the means of communication between its parts; it is the first function of a town to provide them. Broadway, the main internal highway, was designed 100 feet between boundaries, with a 27-foot metalled carriage-way from Hitchin Road to the town square, and 9-foot paths on each



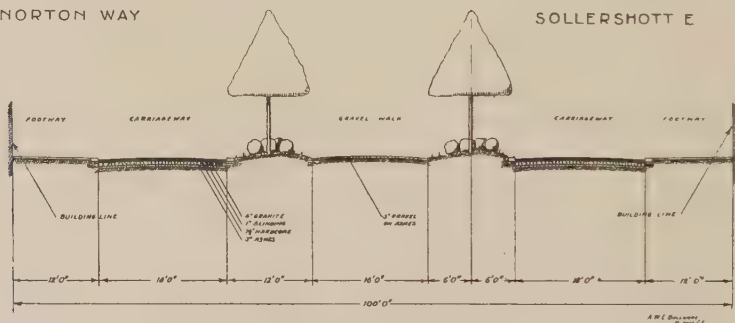
BROADWAY



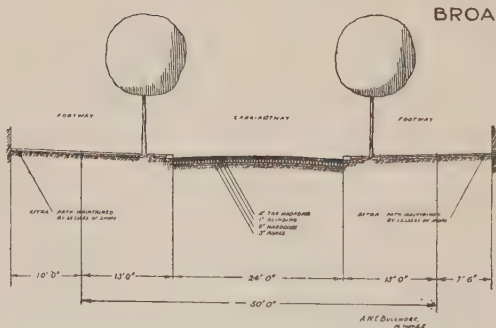
NORTON WAY



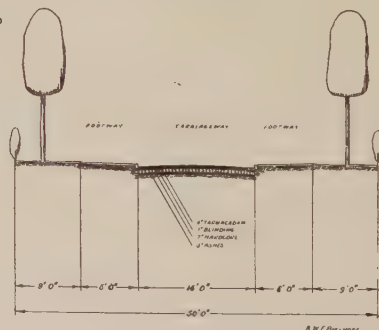
SOLLERSHOTT E



BROADWAY NORTH END



LEYS AVENUE



HILLSHOTT

LEITCHWORTH; SOME TYPICAL ROAD SECTIONS IN THE ORIGINAL LAY-OUT

side. A short section of this road, from Hitchin Road to Spring Road, was first constructed, and about 1924 was completed throughout its entire length. As originally planned an area of 33 feet was reserved on one side of the road for a tramway; but the development of motor transport has shown this to be unnecessary. The northern end of Broadway from the station to the town square consists of two 18-foot carriage-ways, with 12-foot footpaths; the space between the carriage-ways being laid out with two 12-foot greenswards, planted with trees and shrubs, and a 16-foot gravel walk down the centre.

Norton Way, which was the first main highway of the town, is 60 feet between boundaries, with a 16-foot carriage-way, and 12-foot greenswards and 10-foot paths on each side. This is a residential road. It is a through road connecting the north and south parts of the town, and is therefore a road of major importance.

Lays Avenue, the principal shopping street, is 50 feet between boundaries, with a 24-foot carriage-way, and was originally laid out with 16-foot greenswards and 5-foot paths, the lessees of the shops providing 10 feet of paved footway in front of their premises. It was found, however, that the footpaths were too restricted, and that in a road with such heavy foot traffic the greenswards suffered badly; in the endeavour to preserve them they were reduced in area and railed in, but this did not save them and they ultimately had to go.

Sections of the various types of road are given on the opposite page. The original roads made by the company were well constructed, and their widths were considered sufficient for the traffic they were expected to bear in the first instance: the company could not afford to do more. All the major roads have had to be widened, of course, which was allowed for.

Roads of the cul-de-sac type have been used for cottage building, but hitherto, except for one or two examples, not for other classes of building. It has been found that where provision is not made in such roads for through foot traffic a certain amount of inconvenience is caused, and the council has now adopted the policy of putting in footpaths to carry such traffic.

The maintenance of the grass margins to roads has always given a certain amount of trouble. Experience shows that the margins need protection until they are established; they need proper paths made across them from the roadway to the footpath in front of the entrance to every building; the grass needs to be cut at intervals, and kept neat and tidy. But the extent to which they can be maintained at all depends primarily upon the amount of foot traffic to which the road is subject. In a road with little traffic narrow strips of margin can be well maintained, though footpaths are also narrow. But where traffic is considerable and wide footpaths are necessary, and in shopping areas, or wherever there is much standing wheeled traffic, it is not possible to preserve them at all. Low iron fences were used for a time to protect the margins in busy streets; but people fell over them in the dark, and the grass had ultimately to be abandoned there.



The length of new roads at the end of each year is as follows:

<i>Year</i>	<i>Miles of Roads</i>	<i>Year</i>	<i>Miles of Roads</i>
1905	5 $\frac{1}{4}$	1917	13 $\frac{1}{4}$
1906	6 $\frac{3}{4}$	1918	13 $\frac{1}{4}$
1907	8 $\frac{1}{4}$	1919	13 $\frac{1}{4}$
1908	8 $\frac{1}{4}$	1920	13 $\frac{1}{4}$
1909	9 $\frac{1}{4}$	1921	16 $\frac{3}{4}$
1910	9 $\frac{1}{2}$	1922	16 $\frac{3}{4}$
1911	9 $\frac{3}{4}$	1923	17
1912	10 $\frac{1}{2}$	1924	18
1913	11 $\frac{1}{2}$	1925	18 $\frac{1}{2}$
1914	12	1930	21
1915	12 $\frac{1}{2}$	1935	24
1916	13	1940	26 $\frac{1}{2}$

As the town is divided into two parts by the railway line, communications between the two parts constitute one of the town's main problems. The chief engineering work in connection with the highway development was a new bridge to carry the railway over Norton Way. There was originally, when the line was built, a small 'cattle-creep' under the railway, which at that point is on an embankment, to provide access to the land on each side for farming purposes. This narrow passage-way was connected up with Norton Way and provided the only means, except for a footbridge near the station, of communication between the two parts of the estate separated by the railway up to as late as 1911. The new bridge was constructed by the railway company in 1911, the cost (including the roadway) being contributed in the proportions that may be recorded:

First Garden City Ltd.	£2,600
Great Northern Railway Company	£1,900
Hertfordshire County Council	£2,000
Hitchin Rural District Council	£1,500
(of which £1,000 was charged on the parish of Letchworth)	

A second bridge was constructed in 1930 near the station, replacing a footbridge, erected in 1906, which connects Broadway with the northern part of the estate. This bridge, 40 feet between parapets, with a 24-foot carriage-way and two 8-foot paths, was designed by the railway company's engineer, with a superstructure by Barry Parker. The garden city company contributed to the district council the loan charge on a sum of £2,750. There is a footbridge near Dunham's Lane in the factory area.

In addition to the roads constructed by the company, the Hitchin Rural District Council made up Green Lane and part of Works Road in 1908, at a cost of £2,000, of which just under a third was charged on the district, the balance being made a charge on the parish; certain work was done to Icknield Way (a pre-Roman track which runs through the town), the company having first made the road, and to Dunhams Lane, the cost in each case being divided between the district and the parish.

The first roads were constructed under contract; but afterwards the company undertook the work by its own staff. The roads made for the urban district council's housing

schemes were constructed for the council under contract as part of the housing schemes. Since the first war the company put highway construction again out to contract.

The upkeep and maintenance of the roads is undertaken by the company until the roads are taken over by the local authority, and paid for by the lessees in proportion to the length of the frontages of their property under the covenants of the leases granted by the company. In 1911 the Hertfordshire County Council took over a large number of roads for maintenance at the county charge, and further roads have since been taken over by the county council and the urban district council. The position at Letchworth is that some roads are still in the hands of the company, the lessees being liable for maintenance, some are in the hands of the district council (about 16 miles), the local ratepayers being liable for maintenance, and the rest are under the county council (nearly 22 miles), the costs of maintenance falling on the county rate.

The town-plan made no provision for exterior roads, neither, indeed, could it do so, because the company had no powers. The existing roads connected with the Wilbury-Norton road, the unmetalled track, Icknield Way, the Hitchin-Baldock road, and the Letchworth-Willian road. There was access to the Great North Road through Willian Road in the London direction and through Norton on the north. There is an old road since reconstructed connecting Wilbury Road with the Hitchin-Arlesey road, and providing a means of communication to Bedford. Another more important new road was made in 1933, the garden city company contributing to the cost, when the town was given direct connection with the Great North Road by the road built by the county council called Letchworth Gate, thus obviating the dangerous route to the south through Willian and the circuitous route through Hitchin. These roads had long been overdue when they were made. Access to the north is still required and is a matter of urgency; it is now being considered with a view to by-passing Baldock. One alternative route to the east of Baldock has the disadvantage of interfering with a small-holding settlement, the other cuts through the Letchworth estate and would interfere with the village of Norton though it would come close to the industrial area. The latter route, however, as at present designed, would still necessitate the Newmarket traffic passing through Baldock. The solution is perhaps to be found in a new view of the problem.

The roads were first lighted by gas, but the district council replaced the gas lamps gradually by electricity, and all new lighting is done by electricity.

### § 3

The drainage system for the town as a whole was designed for the company by the late G. R. Strachan, and under that system practically the whole of the town area can be drained by gravitation. The separate system of drainage was adopted. In the first instance the sewage was disposed of on temporary sites by means of broad irrigation, the area being gradually increased up to about 110 acres; there were also two small subsidiary disposal areas of about an acre each.

The maintenance of the sewers and the costs of sewage disposal were at first paid for by the lessees under the covenants of the leases granted by the garden city company; the company levying a charge equivalent to 4*d.* in the £ on the poor-rate assessment of the property connected to the sewers up to 1915, in 1916 it was 6*d.*, in 1917 5*d.*, in 1918 and 1919 6*d.*, in 1920 8*d.* and in 1921 9*d.* In 1922, at the request of the company, the responsibility for sewage disposal was undertaken by the urban district council (upon which body, as the sanitary authority, it really lay), and the company conducted the sewage farms on behalf of the council, the costs being included in the general district rate. The temporary works proved satisfactory for a much longer period than was anticipated when they were installed; but in 1923 the urban district council decided that it was necessary to construct the permanent works in accordance with the original scheme; and after public inquiry this was done by the council at a cost of £45,000, on an area of about 30½ acres on the extreme northern boundary of the estate. The council is now intending to extend the sewage disposal works to deal with the ultimate population of the town at a cost of £150,000.

Apart from open ditches the company did comparatively little in the way of surface drainage, advantage being taken of a brook which ran through the town. The district council is now gradually laying surface-water sewers throughout the town.

The following are the lengths of sewers laid by the company, excluding those laid by the district council:

<i>Year</i>	<i>Miles of Sewers Laid</i>	<i>Year</i>	<i>Miles of Sewers Laid</i>
1905	3¾	1917	19¼
1906	8¾	1918	19¼
1907	10	1919	19¾
1908	11	1920	19¾
1909	11¾	1921	20
1910	12½	1922	20
1911	13¼	1923	20¼
1912	14	1924	21
1913	15¾	1925	21½
1914	16½	1930	23
1915	18	1935	25½
1916	19	1940	26

Up to 1940, the district council had laid a further six miles of sewers.

#### § 4

Among other public services a burial-ground is provided by the district council, on land purchased from the garden city company. Refuse disposal is undertaken by the council as part of its sanitary duties. For some years the refuse was dumped at various spots on the agricultural belt, but the council constructed a pulverizer to deal with 3,000 tons of house refuse per annum; but the pulverizer ceased to be operated in 1929 and the refuse has since been disposed of at a tip jointly constructed by the Letchworth and Baldock urban district councils. The council has under construction, however, the erection of an up-to-date destructor.



§ 5

The water-supply scheme was prepared by the late G. R. Strachan, and is still carried on by the garden city company as part of its general business. The pumping station was placed just outside the town area on the Baldock road, 300 feet above sea-level. The first borehole was sunk to a depth of 220 feet below ground-level, and was originally tested up to 6,000 gallons per hour. The reservoir was constructed on the Weston Hills about a mile from the pumping station, and the top water-level in the reservoir is 465 feet above sea-level. In 1907 arrangements were made with the Baldock Urban District Council to include that town in the water supply, the water being taken by the council in bulk and distributed by it. The plant was extended in 1907, 1912, 1919, 1924, and 1928. A second pumping station was constructed on the Willian-Baldock road, about half a mile from the original pumping station, in 1935, extended in 1939. The works have now a pumping capacity of 120,000 gallons per hour, with an equivalent stand-by plant. A third station is in preparation. The mains vary from 12 inches to 3 inches, and the total laid at the end of each year, together with the annual water consumption, are shown in the following table:

<i>Year</i>	<i>Miles of Main Laid</i>	<i>Million Gallons Pumped</i>	<i>Year</i>	<i>Miles of Main Laid</i>	<i>Million Gallons Pumped</i>
1904	5	—	1917	23½	161
1905	12	10	1918	24	185
1906	15	16	1919	24¼	177
1907	15¾	22	1920	26	159
1908	16¾	34	1921	27	151
1909	17½	41	1922	27	147
1910	18½	53	1923	27¼	178
1911	20	70	1924	27½	212
1912	21	85	1925	28	228
1913	21¾	93	1930	30¾	274
1914	22½	94	1935	33	285
1915	23¼	99	1940	36	359
1916	23½	136	1945	36¾	576

The scale of charges is based on the ratable value of the premises served, or on volume metered. The water is of good quality though somewhat hard, and the undertaking is a very successful piece of engineering development carried out by stages.

§ 6

The relative advantages of gas and electricity were matters discussed when the estate was developed, and the garden city company decided to install gas works in the first instance. Charles Hunt designed the works, which were placed in the factory area, and started production in 1905. The first unit was designed to supply six million cubic feet per annum, but the first full year of working showed a consumption of five million cubic feet, and the second no less than twelve million. The works had therefore to be extended at once and extensions have since been almost continuous. The company has always

been surprised at the demand, which always exceeded expectations. In 1947 a supply of five million cubic feet per week was required at the peak periods. A large daylight consumption has been a feature of the works, owing to the quantities used by the factories and by the use throughout the town of gas stoves for domestic cooking. The length of mains laid and the annual consumption are shown in the following table:

<i>Year</i>	<i>Miles of Mains Laid</i>	<i>Cubic Feet in Millions</i>	<i>Year</i>	<i>Miles of Mains Laid</i>	<i>Cubic Feet in Millions</i>
1906	7 $\frac{3}{4}$	5	1918	18 $\frac{1}{2}$	113
1907	11 $\frac{3}{4}$	12	1919	18 $\frac{3}{4}$	92
1908	13	22	1920	19 $\frac{1}{2}$	104
1909	13 $\frac{1}{4}$	26	1921	20	97
1910	14 $\frac{1}{4}$	32	1922	21	100
1911	14 $\frac{3}{4}$	40	1923	21 $\frac{1}{2}$	108
1912	15 $\frac{1}{2}$	50	1924	22	118
1913	16	60	1925	23	118
1914	17 $\frac{1}{4}$	65	1930	26 $\frac{1}{2}$	141
1915	18 $\frac{1}{4}$	69	1935	28	145
1916	18 $\frac{1}{2}$	86	1940	31 $\frac{1}{2}$	156
1917	18 $\frac{3}{4}$	103	1945	32	200

## § 7

The demand for electricity had to be met, and the garden city company's electrical undertaking was started in 1907. O'Gorman and Cozens-Hardy designed the electrical plant and main system. The supply was originally direct current, but is being changed to alternating current to bring it into conformity with later practice. The original plant consisted of two horizontal suction gas engines driving two dynamos, each capable of 65 kW output. From the commencement there was a constant demand for industrial purposes, and in 1910 it was necessary to install a direct-coupled Diesel engine of 135 kW output, and in 1912 a 385-kW 4-cylinder, direct-coupled Diesel set was installed. By the year 1913 the units sold had increased to half a million, the average charge for power being one penny per unit and for lighting fivepence per unit. During the early part of the first war, when practically all the factories were engaged on munition work, it was very difficult to keep pace with the demand. Extensions to the building became necessary in 1915, and three Diesel sets totalling 540 kW were installed. Less than a year later the plant was further increased up to a total of 1,445 kW, but even this was insufficient. In October 1916 a 1,000-kW steam turbine and condenser and auxiliary machinery was put into service, and from this date to the end of the war the whole of the plant, totalling 2,445 kW, was running at upwards of 60 per cent load factor. In 1921 a further 1,000-kW steam turbine was installed and four of the smaller Diesel and gas engine sets were sold. This change brought the total capacity of the station to 2,890 kW. Additions to the turbo-alternator plant were made as follows:

1925 . . . . .	2,000 kW	1935 . . . . .	5,000 kW
1928 . . . . .	2,000 kW	1942 . . . . .	7,000 kW
1930 . . . . .	3,000 kW	1947 . . . . .	7,500 kW

The electricity supply was first given within the industrial area only, but the mains were gradually extended until practically the whole town area was served. The total length of main cable laid and the units consumed each year are shown in the following table:

<i>Year</i>	<i>Miles</i>	<i>B.T. Units</i>	<i>Year</i>	<i>Miles</i>	<i>B.T. Units</i>
1908	$\frac{1}{2}$	44,017	1919	12	3,361,500
1909	$1\frac{1}{4}$	91,400	1920	14	2,455,500
1910	2	148,176	1921	15	1,936,600
1911	$2\frac{3}{4}$	217,528	1922	$16\frac{1}{2}$	1,912,340
1912	3	415,650	1923	$18\frac{1}{2}$	2,718,450
1913	5	501,572	1924	20	3,432,000
1914	$5\frac{1}{2}$	513,286	1925	22	3,856,161
1915	8	840,931	1930	83	11,600,473
1916	$10\frac{1}{2}$	3,854,057	1935	109	14,646,417
1917	11	7,151,878	1940	145	27,711,838
1918	11	8,911,800	1945	160	40,726,844

In view of the great extension of the works and the demand for current from the surrounding district, application was made to the Electricity Commissioners for a provisional order placing the supply on a statutory basis and under statutory control, which was granted in 1924; the order covered the urban districts of Letchworth and Baldock, the parish of Willian, and parts of the parishes of Radwell and Stotfold. Under further orders the supply was extended to Arlesey, Henlow, Shefford, Langford, Astwick, Campton, Clifton, Biggleswade, Meppershall, and Lower Stondon. The garden city has thus played an important part in the development of the rural areas surrounding it, which it was intended to do. Under the electricity nationalization scheme the undertaking has passed out of the hands of the company and an important factor in the economic prosperity of the garden city enterprise has been removed. Such losses are inevitable in the growth of communities and the development of social and economic life, but they are none the less severely felt. Those who show the way often pay for their enterprise and initiative as the garden city company has done. Under an agreement made in June 1947 between the company, the Ministry of Fuel and Power, and the Electricity Commissioners, a subsidiary company called Letchworth Electricity Ltd. was formed to take over the electricity undertaking preparatory to its transfer, otherwise the entire garden city might have been taken over as ancillary to the electricity supply! The subject is returned to in the chapter on finance.

A testimony to the foresight with which the company handled the electricity supply was found in the fuel crisis in February 1947, when the power supply to industry was cut off throughout the country. The company's undertaking had sufficient fuel stocks to maintain the normal supply, and was at first allowed to do so, then permission was withdrawn, and the supply had to be cut; but after a day or two permission was renewed and the Letchworth manufacturers had the satisfaction of being able to continue working when other factories were closed.



## § 8

The circumstances at Letchworth with regard to the public service undertakings were originally somewhat peculiar. The undertakings, as already stated, were not established under any parliamentary powers, and, with the exception of the electricity supply since 1924, were therefore apparently almost wholly outside the law dealing with such works. The supplies were made to the inhabitants subject to agreement between the company on the one hand and the consumer on the other. Apart from this agreement there was nothing to compel the company to give supplies (other than the supply of electricity since 1924), though they were offered as far as possible to every tenant on the estate as they constituted important auxiliaries to the development of the town.

The undertakings were used, that is to say, not merely for the sake of the profits they directly earned, but primarily as adjuncts to the company's main business, which was the development of the town. It will be seen, therefore, that it might have occasionally happened for extensions of the works to be carried out with the object of furthering the development of the town when, strictly in relation to the particular undertaking, they were not required, and might have been unproductive. This practically never happened on any scale, because the company was always short of capital. But it was none the less a great advantage to it to have these services under its own control, and not to be dependent upon outside suppliers. A certain amount of immediately unprofitable expenditure is probably inevitable in undertakings operating on such an estate as at Letchworth; and even if they did not form a part of the main undertaking, but were carried on entirely on their own account, it is certain that they could not escape some loss. For example, owing to slowness of development and the number of unlet plots on roads otherwise fully developed, the mains laid, together, perhaps, with a proportion of expenditure at the head works, were not fully remunerative. Under such circumstances there can be no doubt that an independent company would consider it advisable to cover its loss by increasing the charges to consumers. It was not, however, to the interest of the garden city company to pursue that course; for it was necessary to it as a land development organization that the charges for such supplies should be as low as practicable. Indeed, a reduction was made in the charges for electricity at the beginning of 1913 to encourage factory development, although it caused a heavy reduction in the profit. The company had always maintained these supplies at a high standard of efficiency, which could not have been improved upon by undertakings with statutory powers and greater financial resources; they therefore proved to be valuable assets to the company and contributed to its economic success.

## § 9

The branch of the London and North Eastern Railway from Hitchin to Cambridge and the eastern counties ran through the estate. The steps taken to secure a railway

# PLATE I

A characteristic house built on Wilbury Road (1905).

*Barry Parker, Architect*



An early house on Gartley Road (1905).

*Crickmer & Foxley, Architects*

A house on Letchworth Lane, built by the architect for himself in 1904 and extended in 1912.

*Barry Parker, Architect*





## PLATE II



Houses in South View (1912).

*Crickmer & Foxley, Architects*

A group of houses, South Place (1912).

*Crickmer & Foxley, Architects*



Sollershott House, a group of co-operative houses (1910).

*H. Clapham Lander, Architect*



# PLATE III

an early scheme of workmen's  
houses in Common View (1908).

*Crickmer & Foxley, Architects*



Burnell Walk, a cul-de-sac in a  
public utility society's scheme  
(1913).

*Bennett & Bidwell, Architects*

Rushby Walk, a cul-de-sac in a  
public utility society's scheme  
(1913).

*Parker & Unwin and C. M.  
Crickmer, Architects*



## PLATE IV



An early scheme of workmen's houses grouped round a small green in Common View (1908).

*Crickmer & Foxley, Architects*



public utility society's scheme  
Lytton Avenue (1907).

*C. M. Crickmer, Architect*



Part of the district council's first  
housing scheme (1919-21) in  
Jackmans Place.

*Crickmer & Foxley, Architects*



## PLATE V

These three photographs and the one at bottom of Plate IV illustrate parts of the urban district council's first housing schemes (1919-21). They were taken soon after the houses were built, before the gardens had got established or the street trees had grown: in two of them the trees had not yet been planted.

Blackmans Place.

*Bennett & Bidwell, Architects*



Rushby Mead.

*Crickmer & Foxley, Architects*



Blackmans Place.

*Bennett & Bidwell, Architects*



# PLATE VI



Small houses in Rushby Mead, showing the street tree planting (1924).



Broadway, looking towards the station (1924).



Willian Way (1939). The street trees not yet fully grown nearly meet overhead.





Bedford Road and the agricultural belt to the north-west (1945).



## PLATE VII

A part of Broadway to the south, with its double avenue of trees (1945).

on Way in 1914. The trees  
become established but were  
yet fully grown. They now  
ost cover the roadway in  
mer.





St. Michael's Church, Norton Way (1907).

*C. H. Crickmer and E. H. Heazell, Architects*



The Methodist Church, Norton Way (1914).

*George Baines & Son, Architects*



The Free Church in Norton Way as it was rebuilt in 1924.

*Barry Parker, Architect*





altar of the church of St. Hugh, Pixmore Way (1908).

*Charles Spooner, Architect*



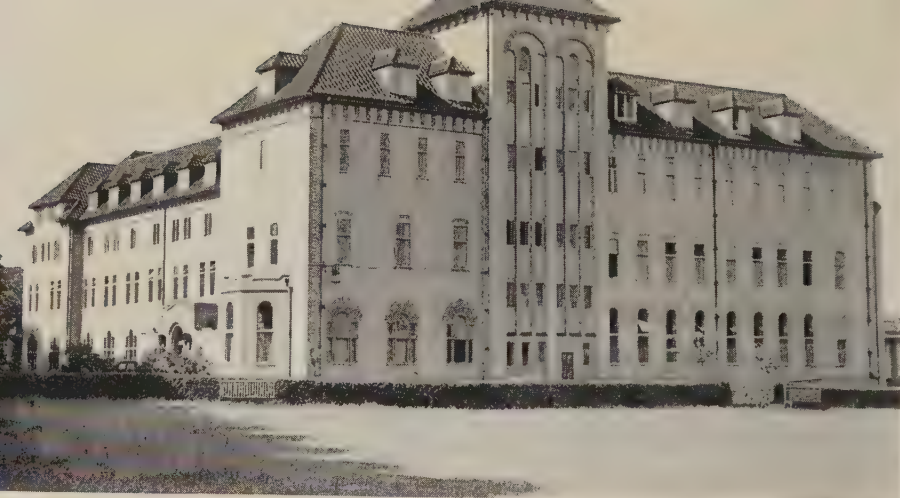
The entrance to the Cloisters (1905).

*W. H. Cowlshaw, Architect*

## PLATE IX

Friends' Meeting House, built  
1807, the second of the new  
houses buildings in the town.  
*Bennett & Bidwell, Architects*





St. Francis College, Broadway.



the vestibule of the theatre at St. Francis College.

*P. Morley Horder, Architect*



## PLATE XI

The urban district council's offices built in 1934, with a cinema to the right.

*Bennett & Bidwell, Architects*



The public library and museum.

*C. M. Crickmer, Architect*



Town Square.





Letchworth from the air in 1937. Broadway and the Town Square lead to the railway station and their line is continued to the north by a wide grass path through Norton Common to Wilbury Road. There is much vacant land in the centre, which, of course, is inevitable, for here the town's future important buildings will be placed. The industrial area to the north-east can barely be distinguished. There are playing fields to the south-east.





The above view of Station Place, Broadway, and the shopping centre, taken in 1926, indicates how much Letchworth owes to its tree-planting. Except for some land in the foreground the area is built up.



Leys Avenue in 1936. The building was done in 1907-23.



## PLATE XIII

These characteristic small shops in Leys Avenue were built in 1908.



The Spirella Company's factory near the railway station, the first unit of which was built in 1908

*C. H. Hignett, Architect*



An engineering works on Birds Hill (Lloyds & Co. (Letchworth) Ltd.) (1908).

*H. Burr, Architect*



A scientific instruments works on Pixmore Avenue (Foster Instrument Co. Ltd.) (1907).

The Irving Air Chute of Great Britain's factory, New Icknield Way (1939).











A small holder's cottage (1905).



An early seventeenth - century house, now cottages, in Letchworth Lane.



Norton village with the church and inn.

service have already been related. A temporary station was built and opened for traffic in 1905. So slow, however, was the railway company to act that a permanent station was not constructed and opened until 1912. The goods yard was opened in 1905. The railway company had acquired from the garden city company a total of  $24\frac{1}{2}$  acres for this and other railway purposes. The train service was gradually increased and improved as the population grew, under the continued pressure of the inhabitants of the town and the garden city company, and although there was some progress towards a really good passenger train service until the second war stopped developments, the train service remains poor and greatly in need of improvement, with more fast trains to London.

### § 10

Apart from the railway there was no regular transport between Letchworth and the surrounding towns until 1912, when a motor-omnibus service was established between the town and Luton, via Hitchin. Prior to that date the garden city company had run a horse-omnibus service in the town; the new motor service, however, covered the same route and the company's service was discontinued. With the development of road transport the town has connections by motor bus throughout the district.



## CHAPTER VI

### ITS AGRICULTURE

The idea of acquiring from the outset not only the site of a town but the country immediately surrounding it, so that the town may never unduly expand and may retain its rural surroundings, while the need for expansion is met by the grouping together of similar settlements.—SIR RALPH NEVILLE (1904)

#### § 1

ONE of the main social objects of the garden city was to help to stem the tide of rural depopulation by combining the attractions of town and country life. This aim was in the forefront of the minds of the promoters of Letchworth, and was among the first matters considered in connection with the development of the town. The total area of the estate when originally purchased was 3,822 acres, of which it was decided to retain the greater part as an agricultural belt. With purchases that have since been made the area of the estate is now 4,598 acres, of which the agricultural belt is 2,416 acres. With the exception of one or two comparatively small residential properties the whole of the estate when purchased was in agricultural occupation, about one-third being pasture and the rest arable. There were nine farms between 252 and 842 acres, at rents ranging from 8s. 6d. to 25s. per acre, and four smaller holdings from 2 to 79 acres, at rents from 16s. to 43s. per acre, and 15 allotments with a total area of 5 acres let at 44s. an acre. As the low rents suggest, the properties were as a whole badly neglected, some of the buildings not having been repaired within the knowledge of any local resident, and much of the land being poorly cultivated. Comparatively little labour was employed; the total population was 400, spread in the three villages of Letchworth, Willian, and Norton, of whom a considerable number was not employed on the estate. The following table gives the particulars of the principal farm holdings in 1903:

<i>Farm</i>	<i>Area in Acres</i>	<i>Rent per Acre</i>	<i>Farm</i>	<i>Area in Acres</i>	<i>Rent per Acre</i>
1	462	12s. 6d.	8	371	13s. 6d.
2	842	16s. 0d.	9	388	25s. 0d.
3	278	17s. 0d.	10	265	16s. 0d.
4	293	8s. 6d.	11	55	16s. 0d.
5	79	25s. 0d.	12	14	43s. 0d.
6	484	22s. 0d.	13	2	19s. 0d.
7	252	16s. 0d.			

With one or two exceptions the farms were held under yearly tenancies, and immediately on completion of the purchase in 1903 the tenants were given notice to quit, which was necessary to enable the company to put in hand its development programme, new

# THE LETCHWORTH ESTATE

OF  
FIRST GARDEN CITY LTD

COMPRISING ABOUT 4500 ACRES

DEVELOPMENT SPRING 1924 - ESTATE OFFICE, LETCHWORTH

SCALE 1:50,000

PROPOSED ROADS & OPEN SPACES SHOWN  
ON THIS PLAN ARE NOT RELEASED - TERMINAL  
AND BOUNDARY TO PUBLIC RIGHTS OF WAY  
AND LINES & BOUNDARY TO ROAD LINES  
AND SHALL NOT BE TAKEN AS THE BASIS  
OF ANY CONTRACT



Based upon the Ordnance Survey by permission of  
the Director-General of Ordnance and the Controller  
of the Ordnance Office

A PLAN OF THIS ESTATE MAY BE OBTAINED FROM THE  
ESTATE OFFICE ON THE SPOTS OFFICE

PLAN OF THE LETCHWORTH ESTATE SHOWING THE AGRICULTURAL BELT (1924)  
This plan may be compared with the development plan of 1947 (page 95).

agreements being entered into with most of them on their consenting to give up possession of one-tenth of their holdings in any one year if required on payment of the usual compensation. Some of the tenants were resentful at the sale of the land and the disturbance caused to their affairs, and expressed their dissatisfaction by creating as many difficulties as possible. Fortunately the two men holding the land in the centre of the estate were sympathetic to the objects of the company, which facilitated the early stages of development. It must be recorded, however, that the presence of the farm tenants, however friendly, was embarrassing until the area upon which the development of the town was to start came fully into the company's hands. That did not happen for some years, for the farmers were allowed to go on with their cultivations (though to a decreasing extent) until well into 1910, when the company took over all the land in the town area which it began to lay down to grass or to farm on its own account. The farm tenancies were gradually rearranged, the larger farms being divided into smaller holdings so far as the number of homesteads permitted, the buildings being repaired and improved, the standard of farming raised, and the rents increased to a more economic figure. From the start much money was expended by the company upon the improvement of farm buildings, especially upon dairies and cow sheds.

## § 2

The 'back to the land' propaganda of the early years of the century was very strongly felt, and a conference on the subject of small holdings was held at an early date. Many people considered that the company should adopt a definite policy in connection with encouraging small holders to settle on the estate, and the directors were not averse to such a policy in principle; but the company did not have the capital to provide cottages and buildings, so that of the many hundreds of applicants for land that were received only those could be dealt with who had sufficient capital to build for themselves. The company offered such applicants a quarter-acre site or thereabouts on a ninety-nine-year lease for the building of a cottage, and an area of agricultural land attached to the sites on lease for twenty-one years. The men who had the capital to accept such an offer were few, and among them those who had experience of agriculture were fewer still. In 1907, in pursuance of its sympathetic policy towards small holdings, the company organized an exhibition of houses and buildings suitable for small holders. Although the company took care to accept as tenants only those applicants who seemed to show most promise, none was ultimately successful.

With a view to assisting in the establishment of small holdings, a society called Norton Small Holdings Ltd. was formed in 1905 by E. O. Fordham, Lord Lucas, Sir Richard Winfrey, and C. R. Buxton, for the purpose of renting about 150 acres from the company with a homestead and buildings and letting it off in small areas up to 20 acres. Twelve cottages were built by the society and let to carefully selected tenants, pigsties were erected, and about 10 acres planted with fruit. The intention was to assist men



who had some knowledge of agriculture to run small holdings with some measure of co-operation. The society paid the company 25s. an acre for land and let it to its own tenants at 35s.. The undertaking was not successful, in spite of the hard work and enthusiasm of those who were interested in it.

Agricultural depression due to low prices was the cause of these failures. The land, it is true, was not specially suitable for the purpose, and the local market, which the small holders expected, was slow to get established; but the general economic conditions of agriculture, which depended mainly upon the exploitation of low-paid labour, was the cause. The local wages of a skilled ploughman, who was also able to act as a cowman, were in 1903 thirteen shillings a week, out of which he had to pay a small sum for a four-roomed cottage and a further small sum for an allotment. The small holder was not able to live on such a basis.

The total number of agricultural occupiers is now just under eighty, compared with thirteen when the estate was purchased, the rents ranging from 25s. to 60s. per acre; and though the area of the estate under cultivation is considerably less than it was, owing to the growth of the town, the amount of labour employed in agriculture is probably three or four times as much as when the property was purchased.

### § 3

Although practically every house in the town has a garden in which vegetables can be grown, which provides as much land as the average man cares to work, the demand for allotments, though not so large as in a town with small gardens, is an increasing one, and the total area now let for that purpose is  $71\frac{1}{2}$  acres, and the number of allotment holders is 678.

### § 4

The chief products of the agricultural belt are fruit and dairy produce. A small amount of land is used for market gardening; but the land is not specially suitable for this purpose, being, in the main, rather exposed and needing considerable 'making.' Apples, pears, and soft fruit are grown in quantity for the local market. The production of milk and other dairy produce is, however, the main agricultural industry, in which should also be included the production of fat cattle for the local market. It is not possible to tell to what precise extent the demands of the new town are met by the produce of the agricultural area. That the area does not meet the needs of the town is certain. The production and distribution of produce is not organized in any way, and the attempts that have been made from time to time to get the small holders and farmers to work together have met with failure. It would seem, however, that it would pay the town for the working of its agricultural belt to be so organized as to produce the maximum amount of foodstuffs for the population. At some time it may be hoped something of the kind will be seriously attempted, so that the objects of the garden city may be fully realized.

## § 5

The agricultural belt of a garden city is a constituent part of the town's economy. It is as essential to it as its roads and water supply and other services. It is as necessary as recreation grounds or a shopping centre. The great advantage that Letchworth possesses is that, by reason of the company's ownership of the estate, the structure of the town definitely incorporates a large agricultural area. This land exists not as prospective building land upon which the agricultural industry has but a precarious hold, but as a real belt of rural land which can be maintained as such for all time. As the town grows the function of this land will increase in importance, and its significance will be even more unmistakably perceived than it is to-day. Its actual economic value as agricultural land will also increase, and more and more will it be to the advantage of every one concerned that it should be worked to yield the utmost return. The effect of the garden city upon agricultural life can already be seen at Letchworth, although the rural belt is still the least developed part of the town. The agricultural population has been increased, the cultivation of the soil has enormously improved, wages are higher, and the condition of the farm worker, his outlook and interests, have been raised to the level of those of the town worker. On the other hand, the townsman and factory worker have been brought into immediate touch with the country. The population of the town, most of whom would otherwise have seen little if anything of the processes of nature on the land, are now as familiar with them as with any other incident of their daily lives. Some contact with agriculture, the original and basic industry of mankind, is still necessary for a full education, and that contact is granted to all the children brought up in such a town as Letchworth.

The effect of the establishment of Letchworth is felt over a much wider area than the agricultural land actually in the hands of the garden city company or within the urban district. For ten miles around, the 'city' is not London but Letchworth; throughout the whole rural district the villages have more money in them because of the existence of Letchworth, for there is not a village where there are not families with one or more members working in the town. The little town of Baldock is now almost entirely dependent upon Letchworth, all the villages have increased in size as a result of its existence, and the towns of Hitchin and even Royston have grown as well.

It was claimed by the first advocates of garden cities that such towns would help to prevent rural depopulation by making rural life more interesting and profitable, by (1) enabling farmers to organize, (2) giving them a market at their doors, (3) helping to provide a more efficient class of labourer, and (4) bringing the rural worker in touch with urban life. That this claim was well founded Letchworth has shown, and in nothing has the town more clearly demonstrated its sound economic basis, and in nothing has it more to promise in the future than in the marriage of town and country that it has brought into being, although the issue of that marriage is only in its infancy.

## CHAPTER VII

### ITS FINANCE

If the difficulties of building garden cities were infinitely greater than I have ventured to point out, they are very small compared with the prize to be won by the production of a physically superior, and contented and happy people. . . . We cannot attain any finer object, and it will be the means of placing our nation, as a nation, far ahead of any of our competitors.—LORD LEVERHULME (June 1902)

#### § 1

LETCWORTH has been developed by First Garden City Ltd., a joint-stock company incorporated under the Companies Acts. The memorandum and articles of association of the company are similar in most respects to those of an ordinary public company. The chief special clauses in the memorandum are:

3. (a) To promote and further the distribution of the industrial population upon the land upon the lines suggested in Mr. Ebenezer Howard's book entitled *Garden Cities of To-morrow* (published by Swan, Sonnenschein and Co. Ltd. in 1902), and to form a garden city (that is to say) a town or settlement for agricultural, industrial, commercial, and residential purposes or any of them in accordance with Mr. Howard's scheme or any modification thereof.

(c) To found, lay out, construct, manage, and carry on any such garden city as aforesaid, or any section or portion thereof.

(d) To pay upon the ordinary shares or stock of the company a cumulative dividend not exceeding 5 per centum per annum, and to apply any balance of profit after such payment as aforesaid to any purpose which the company or its directors may deem for the benefit directly or indirectly of the town or its inhabitants.

(o) Upon any winding-up or distribution of the assets of the company, except for the purpose of reconstruction, to apply for the benefit of the town or its inhabitants any balance remaining after

1. Repayment of the paid-up capital of the company.
2. Any sum required to make up a cumulative dividend of 5 per centum per annum thereon.
3. Any bonus not exceeding 10 per centum upon the amount paid up on the ordinary shares.

An important clause in the articles of association reads as follows:

129. Subject to the rights of the holders of any debentures or shares entitled to any priority, preference, or special privilege, the net profits of the company, after providing for a reserve fund and for depreciation of the company's properties, shall be divisible by way of dividend among the members in proportion to the amount paid up on the ordinary shares held by them respectively, but so that the dividends upon the ordinary shares for any year shall not exceed the aggregate rate of 5 per centum per annum. The surplus of the net profits of the company, after payment of such dividends and any amount necessary to make up dividends for past years to the rate of 5 per centum per annum, shall be devoted to the provision of traffic facilities, water supply, lighting, drainage, markets, hospitals, libraries, baths, or otherwise for the embellishment of the town, the provision of means of education, recreation, or amusement for the people, or for any other purpose which the company or its directors may deem for the benefit of the town or its inhabitants.



The object of the clauses dealing with limitation of dividend on the ordinary shares was to establish the principle on which the company was founded, which was to secure the increased value of the land for the benefit of the future community.

## § 2

The authorized share capital of the company was originally £300,000, divided into 59,400 ordinary shares of £5 each and 3,000 ordinary shares of £1 each. The directors went to allotment in September 1903 on 8,000 £5 shares (£40,000). The prospectus was issued in the ordinary way and advertised in the press, but the Stock Exchange took no interest in the issue, and there were no brokers handling it. The impossibility of any speculative profits being made in the shares owing to the limitation of the dividend put them as ordinary shares out of the range of capital issues that made any appeal to the money market and the investor. Thus capital was subscribed only by the directors and the friends of the scheme and the public issue was a complete failure. Among the board of directors were men well known in business, Edward Cadbury, W. H. Lever, T. H. W. Idris, and others; but this was not sufficient to arouse financial interest in the undertaking from an investment point of view. In fact, the directors were if anything over-cautious and warned the investor. They said in the first prospectus (September 1903):

It is difficult to speak with certainty of the financial prospects of an undertaking which presents some features of novelty, but the directors (who themselves and their relations are finding about £40,000 of the capital) believe that if sufficient capital is subscribed the undertaking will soon become dividend-paying, and prove a sound investment at a cumulative rate of 5 per cent per annum.

It must fully be admitted that the directors of Letchworth, scrupulously honest and fully conscious of the pioneer nature of their enterprise, never at any time promised much in the way of dividends when attempting to raise money. They believed that the undertaking would pay, and they said so; but they were not over-confident of immediate success. In a letter issued the first year they said: 'Although the permanent success of the project is, in the opinion of the directors, practically assured, they do not anticipate paying any dividend for the first two or three years, but believe that the full dividend will eventually be paid.' In an interim report from the chairman, dated 24th June 1907, issued with a view to raising further share capital, he said that the payment of dividend was 'not to be expected for perhaps the next three years.' At the next annual meeting, in January 1908, he said that 'the arrears of dividend are a charge on the future profits, and will, in my opinion, all be paid some day out of the profits of the company.' These moderate statements were fully confirmed in due course.

In October 1906 the directors decided to create a series of 4 per cent debentures, constituting a floating charge on the assets of the company, and repayable in 1930. The

issue of the debentures, which were not offered to the public but to the shareholders and their friends, enabled the company to raise money more easily than by the issue of shares, for the directors were able to pay at once the interest on the money subscribed. The directors did not intend, however, that the debentures should replace the issue of share capital, and from 1906 to 1909, when the last share prospectus was published, over £23,000 was subscribed in shares. When the company appeared to be near the stage when dividends could be paid, the chairman sent a letter to the shareholders urging them to increase their shareholdings. He said:

We ought to declare a small dividend in January 1915 (possibly, but not certainly, even sooner), gradually increasing until the full 5 per cent is reached, and by and by begin to pay off the arrears. . . . Meanwhile the growth of the town entails a capital expenditure of about £20,000 a year for roads, sewers, extensions of gas, water, and electricity, and so on. For this purpose we have raised a good deal of loan capital during the past few years; and it is not desirable to go on borrowing capital without increasing our share capital also.

Letchworth continues to grow steadily, and every cottage that we can get built is occupied as soon as it is ready; but in developing a large estate, such as ours, for a complete manufacturing and residential town, it is inevitable that a large amount of capital should be locked up in development, which only becomes gradually revenue-bearing. In spite of this, however, we should have been paying a small dividend long ago if all our capital had been in shares, and not to a large extent in loans carrying interest which has to be paid each year, and charged against revenue. Moreover, a good many expenses which really belonged to the future of the estate have had to be paid out of current revenue. The task we have set ourselves is totally different from that of developing a comparatively small area as a suburb for the overflowing population of an existing city; there the whole area can be rapidly developed and made revenue-bearing. These inherent difficulties First Garden City Ltd. has now overcome: It has paid interest on its loan capital throughout; it has accumulated a very great reserve fund in the form of the increased capital value of its estate, and now it is earning a net profit on revenue which will, I am confident, enable a dividend to be paid for the financial year just commenced. The directors ask you to help them, to the utmost of your ability, to provide the capital necessary to carry on the development up to that point.

In 1913 a first dividend of 1 per cent was paid, but when the first war came the directors decided to postpone the payment of further dividends, and in 1915 they created a new series of £50,000 second debentures, bearing interest at  $4\frac{1}{2}$  per cent, and constituting a second floating charge on the assets of the company, to meet the necessary expenditure on development. A year later, in 1916, it was decided to issue 10,000 of the £5 unissued shares of the company as preference shares entitled to a fixed cumulative dividend at the rate of 5 per cent per annum and ranking in priority to the ordinary shares. These were offered to the shareholders to meet further development expenditure, and after the war, at a time when money was at a high rate of interest (May 1920), an issue of £50,000 of 7 per cent Gas Works Mortgage Debenture Stock was created as a specific first charge on the company's gas works. This stock was repaid in 1925.

There is no need to relate in detail the various further motions of the company to increase its capital; they were the outcome of the evolving financial strength of the concern. In January 1946 the share capital was brought up to £600,000, divided into

£150,000 cumulative preference stock, £250,000 ordinary stock, and £40,000 shares of £5 each. The conversion of shares into stock is a common practice, and is done because the registration of stock is simpler than the registration of shares. The stock is fully paid, and the shares remain to be issued. In addition, the loan capital in 1947 consisted of £256,433 5 per cent first mortgage debenture stock (repayable 1952-71), £200,000 4 per cent stock, £200,000 5¼ per cent registered debenture stock (repayable after 1948 at 104 and finally in 1963 at 102). Also there were secured loans and mortgages, a bank overdraft, and other loans, amounting in total to £345,815. Thus the issued share capital was £400,000, while the loan capital in various forms was £1,112,730, a total capital of £1,512,730. As will be related, the loan capital has since been reduced.

The influence of borrowed money upon the undertaking is of importance in considering its financial position, and something further will be said about this later. As the directors did not expect to raise the whole of the original purchase price of the property on the first prospectus, they arranged in connection with the purchase for a proportion of the purchase money to remain on mortgage, so that in the first year the company had mortgages of £83,934 secured on the freehold of the estate at 4 per cent interest. The company also borrowed money from the Lands Improvement Company for certain expenditure on water, sewerage, and highways; these loans ranked as first charges and were repayable over periods of from twenty-five to forty years. Money was also raised from the bank on the mortgage of certain properties; some part of this money on overdraft account fluctuated in amount.

The payment of dividends on the ordinary shares was resumed in 1918, when 2½ per cent was paid; the same amount was paid in 1919, 1920, and 1921, in 1922 the dividend was 4 per cent, and in 1923 the maximum dividend of 5 per cent was reached and has since been maintained.

A start was made upon the payment of the accumulated arrears of dividends in 1937, and at the annual general meeting in 1946 the chairman was able to tell the shareholders that the company was in a position to pay out of accumulated balances of profits the full remaining total of the arrears of dividend, which then amounted to £113,224 18s. 11d. The confidence of those who believed in the garden city as an economically sound enterprise was therefore at last fully rewarded. The directors were undoubtedly greatly surprised and disappointed at the slow progress of the undertaking, and much of their time was taken up, particularly in the ten years from 1907 to 1917, in searching for an explanation.

### § 3

This matter will be discussed later on, but first we shall give a summary of the financial position of the company, the capital raised, and the expenditure from year to year. This is contained in the following tables:



TABLE A

THE CAPITAL RAISED BY THE COMPANY FROM YEAR TO YEAR  
(ACCUMULATIVE FIGURES)

<i>Year</i>	<i>Ordinary Share Capital</i>	<i>Preference Share Capital</i>	<i>Mortgages, Loans and Debentures</i>	<i>Total</i>
	£	£	£	£
1904	100,692	—	83,934	184,626
1905	127,927	—	91,891	219,818
1906	148,320	—	111,524	259,844
1907	155,861	—	131,196	287,057
1908	167,056	—	144,837	311,893
1909	172,046	—	161,237	333,283
1910	174,212	—	175,579	349,791
1911	175,446	—	195,361	370,807
1912	176,331	—	206,596	382,927
1913	181,036	—	249,534	430,570
1914	191,836	—	268,675	460,511
1915	192,688	—	289,769	482,457
1916	192,939	5,370	318,037	516,346
1917	192,944	5,625	309,152	507,721
1918	192,944	5,625	291,731	490,300
1919	192,944	5,725	286,255	484,924
1920	192,949	5,730	295,939	494,618
1921	192,949	5,730	322,984	521,663
1922	193,149	5,740	338,074	536,963
1923	194,649	25,160	329,332	549,141
1924	194,749	45,310	320,105	560,164
1925	194,879	46,555	357,444	598,878
1926	194,919	46,755	410,695	652,369
1927	194,959	46,875	455,378	697,212
1928	194,959	46,875	481,234	723,068
1929	195,149	46,975	531,219	773,343
1930	195,209	46,975	602,626	844,810
1931	195,209	47,185	656,873	899,267
1932	195,209	47,185	681,100	923,494
1933	195,209	72,345	707,462	975,016
1934	195,209	150,000	667,420	1,012,629
1935	250,000	150,000	650,356	1,050,356
1936	250,000	150,000	692,553	1,092,553
1937	250,000	150,000	746,260	1,146,260
1938	250,000	150,000	811,131	1,211,131
1939	250,000	150,000	833,598	1,233,598
1940	250,000	150,000	831,497	1,231,497
1941	250,000	150,000	827,946	1,227,946
1942	250,000	150,000	873,777	1,273,777
1943	250,000	150,000	962,299	1,362,299
1944	250,000	150,000	1,017,768	1,417,768
1945	250,000	150,000	971,431	1,371,431
1946	250,000	150,000	1,007,260	1,407,260
1947	250,000 (Stock)	150,000 (Stock)	1,105,991	1,505,991

## THE BUILDING OF SATELLITE TOWNS

TABLE B

EXPENDITURE OF THE COMPANY ON LAND AND DEVELOPMENT  
(ACCUMULATIVE FIGURES)

<i>Year</i>	<i>Land and Buildings</i>	<i>Highways</i>	<i>Sewerage</i>	<i>Open Spaces, etc.</i>	<i>General Develop- ment</i>	<i>Cost of Raising Capital</i>	<i>Total</i>
	£	£	£	£	£	£	£
1904	154,972	3,157	136	232	1,686	2,519	162,702
1905	158,547	12,219	4,781	951	2,722	3,740	182,960
1906	166,856	17,596	9,528	1,207	3,933	6,218	205,338
1907	171,392	24,395	13,205	1,447	5,476	7,024	222,939
1908	172,913	28,327	14,475	1,467	7,745	7,688	232,615
1909	174,377	32,141	15,559	1,540	9,697	8,071	241,385
1910	175,369	34,371	16,349	1,632	10,807	8,395	246,923
1911	175,988	41,092	17,133	1,767	11,619	8,648	256,247
1912	179,945	44,938	18,127	1,856	16,067	9,633	270,566
1913	200,091	47,985	19,688	1,582	20,954	10,741	301,041
1914	214,708	51,778	20,650	1,638	24,832	11,262	324,868
1915	218,211	53,387	21,986	1,753	27,836	11,329	334,502
1916	220,754	54,588	23,124	1,761	29,153	12,021	341,401
1917	220,692	55,445	23,130	1,762	29,697	12,010	342,736
1918	222,724	55,434	23,124	1,761	29,697	12,010	344,750
1919	222,655	55,704	24,244	1,761	30,504	12,010	346,878
1920	224,963	59,768	24,334	1,761	36,165	12,463	359,454
1921	228,624	61,448	24,590	1,761	39,145	12,500	368,068
1922	228,367	61,863	24,978	1,761	42,708	13,184	372,861
1923	246,702	65,519	25,638	1,853	45,912	13,184	398,808
1924	248,265	77,250	27,416	1,922	48,929	13,184	416,966
1925	249,238	83,423	28,096	1,985	51,122	13,832	427,696
1926	253,652	91,060	28,862	2,025	53,830	19,205	448,634
1927	249,047	95,030	30,023	2,058	56,695	19,205	452,058
1928	250,465	98,470	30,412	2,082	60,489	19,313	461,231
1929	253,913	100,817	30,412	2,315	58,229	23,712	469,398
1930	258,617	105,938	32,706	2,438	61,805	25,399	486,903
1931	262,141	113,057	33,274	2,569	64,626	26,530	502,197
1932	271,327	113,514	33,476	2,569	66,272	27,368	514,526
1933	272,038	117,345	33,615	2,569	67,691	27,996	521,254
1934	276,456	120,760	33,727	2,569	68,841	28,298	530,651
1935	280,671	124,445	35,149	2,569	69,638	28,298	540,770
1936	299,745	127,541	36,000	2,569	69,790	28,298	563,943
1937	312,971	135,924	37,227	2,569	69,905	28,298	586,894
1938	314,140	146,788	39,133	2,569	70,926	28,298	601,854
1939	318,491	150,430	39,395	2,569	71,548	28,298	610,731
1940	316,659	191,979		2,569	71,684	28,298	611,189
1941	317,962	192,090		2,569	71,851	28,298	612,770
1942	315,432	192,387		2,569	71,885	28,298	610,571
1943	313,416	192,412		2,569	71,885	28,298	608,580
1944	314,645	192,412		2,569	71,885	28,298	609,809
1945	319,549	192,412		2,569	71,885	28,298	614,713
1946	304,612	192,548		2,569	71,951	28,298	599,978
1947	282,078	192,548		2,569	71,970	28,298	577,463

TABLE C

EXPENDITURE ON WATER, GAS, AND ELECTRICITY WORKS  
(ACCUMULATIVE FIGURES)

<i>Year</i>	<i>Waterworks</i>	<i>Gasworks</i>	<i>Electricity Works</i>	<i>Total</i>
	£	£	£	£
1904	3,272	110	—	3,382
1905	12,894	3,797	—	16,691
1906	15,641	11,293	—	26,934
1907	16,479	16,332	4,554	37,365
1908	19,571	23,019	6,467	49,057
1909	20,454	24,699	6,611	51,764
1910	21,123	26,813	8,530	56,466
1911	21,787	34,529	14,290	70,606
1912	26,183	38,644	21,501	86,328
1913	26,904	47,338	24,253	98,495
1914	32,249	48,942	26,104	107,295
1915	33,329	51,183	38,258	122,770
1916	33,559	54,131	72,775	160,465
1917	33,582	56,841	76,403	166,826
1918	34,447	58,732	77,381	170,560
1919	37,681	60,191	78,827	176,699
1920	43,609	69,124	84,334	197,067
1921	45,235	76,245	103,410	224,890
1922	47,015	85,799	105,372	238,186
1923	52,323	88,375	112,037	252,735
1924	55,785	93,646	119,833	269,264
1925	58,000	102,384	146,071	306,455
1926	61,021	106,182	189,266	356,469
1927	62,387	118,436	210,792	391,615
1928	65,487	120,782	242,560	428,829
1929	66,450	127,823	273,274	467,547
1930	73,572	130,518	335,189	539,279
1931	73,962	132,656	351,672	558,290
1932	74,421	134,696	363,489	572,606
1933	75,015	138,549	383,401	596,965
1934	78,657	142,411	407,192	628,260
1935	85,015	147,524	431,822	664,361
1936	88,995	150,010	476,659	715,664
1937	92,609	153,281	517,864	763,754
1938	94,100	158,026	560,199	812,325
1939	99,313	161,869	590,837	852,019
1940	105,200	162,834	611,114	879,148
1941	108,611	164,696	631,599	904,906
1942	108,759	172,346	721,326	1,002,431
1943	108,896	183,243	839,644	1,131,783
1944	109,073	189,245	879,060	1,177,378
1945	109,514	192,941	877,153	1,179,608
1946	109,679	194,995	880,036	1,184,710
1947	116,816	198,406	1,047,282	1,362,504



## THE BUILDING OF SATELLITE TOWNS

TABLE D

## RECEIPTS FROM RENTS AND OTHER SOURCES

<i>Year</i>	<i>Farm, etc., Rents</i>	<i>Ground Rents</i>	<i>Profit on Water</i>	<i>Profit on Gasworks</i>	<i>Profit on Electricity</i>	<i>Sundry Receipts</i>	<i>Total</i>
	£	£	£	£	£	£	£
1904	3,874	—	—	—	—	148	4,022
1905	3,814	246	70	—	—	984	5,114
1906	3,468	1,356	168	—	—	1,267	6,259
1907	4,423	2,123	308	290	—	1,164	8,308
1908	4,619	2,990	544	808	—	1,316	10,277
1909	4,487	3,574	588	987	—	1,100	10,736
1910	5,278	4,100	653	1,359	—	1,091	12,481
1911	5,273	4,581	837	2,149	22	1,615	14,477
1912	5,404	5,249	1,025	2,660	624	1,462	16,424
1913	5,414	5,617	1,153	3,113	194	1,750	17,241
1914	5,556	6,023		4,641 <sup>1</sup>		1,542	17,762
1915	6,638	6,312		5,598 <sup>1</sup>		4,495	23,043
1916	7,282	6,772		9,720 <sup>1</sup>		2,527	26,301
1917	7,560	6,997		14,132 <sup>2</sup>		395	29,084
1918	8,172	7,469		11,373		666	27,680
1919	8,543	7,808		8,277		158	24,786
1920	8,708	8,400		8,157		1,012	26,277
1921	8,756	8,955		10,256		863	28,830
1922	9,134	9,606		14,823		736	34,299
1923	9,606	10,076		16,220		599	36,501
1924	9,665	10,498		19,171		542	39,876
1925	9,982	11,568	3,413 <sup>3</sup>	5,524 <sup>3</sup>	10,654 <sup>3</sup>	2,361	43,502
1926	10,126	12,487	2,527	5,706	11,218	1,494	43,558
1927	9,855	12,990	3,287	10,358	13,334	892	50,716
1928	8,940	13,596	3,498	8,029	13,476	3,644	51,183
1929	9,556	13,724	4,216	8,899	16,779	2,030	55,204
1930	9,781	14,327	4,701	7,395	19,021	1,680	56,905
1931	9,918	14,700	5,174	8,081	19,949	1,590	59,412
1932	10,622	14,720	5,201	9,105	20,697	629	60,974
1933	11,107	15,057	5,283	8,266	21,224	774	61,711
1934	10,877	15,506	5,393	8,566	24,511	767	65,620
1935	10,878	16,233	5,076	7,064	26,621	861	66,733
1936	11,306	16,832	5,815	7,078	31,901	864	73,796
1937	11,749	17,502	6,924	7,497	28,635	1,269	71,845
1938	11,675	18,721	6,746	6,738	29,915	1,708	72,836
1939	13,143	19,801	6,786	6,611	33,578	886	79,827
1940	13,692	20,640	5,749	9,358	39,250	167	89,110
1941	14,441	20,898	6,721	9,251	51,339	3,238	106,552
1942	14,283	21,194	8,125	8,047	48,974	3,407	104,831
1943	14,089	21,399	8,503	8,052	37,603	3,753	94,217
1944	14,554	21,526	7,534	8,131	38,465	3,953	94,839
1945	14,763	21,566	6,302	9,029	42,064	3,340	97,750
1946	15,148	21,888	7,000	13,075	42,559	2,329	103,320
1947	15,712	21,679	7,130	14,176	45,662	712	106,701
						<i>Hotel</i> <sup>3</sup> <i>Sdry.</i>	
						1,269    807	
						1,708    749	
						886    794	
						167    588	
						3,238    664	
						3,407    801	
						3,753    818	
						3,953    676	
						3,340    686	
						2,329    1,321	
						712    1,630	

<sup>1</sup> The profits on the water, gas, and electricity works are merged in these figures.<sup>2</sup> Since 1917 other profits are included with the profits on the water, gas, and electricity works.<sup>3</sup> Before charging interest and general charges and provision for taxation.

TABLE E  
YEARLY BALANCES ON THE REVENUE ACCOUNT

<i>Year</i>	<i>Revenue Account before charging Interest</i>	<i>Net Balance on Revenue Account</i>
	£	£
1904	439 (profit)	2,979 (loss)
1905	1,135 (loss)	4,732 "
1906	1,469 "	5,575 "
1907	1,516 (profit)	3,333 "
1908	915 "	4,651 "
1909	2,395 "	3,692 "
1910	4,875 "	1,676 "
1911	7,349 "	174 (profit)
1912	10,954 "	3,086 "
1913	12,063 "	3,194 "
1914	12,488 "	3,034 "
1915	16,571 "	5,704 "
1916	17,853 "	5,720 "
1917	19,212 "	6,003 "
1918	18,778 "	5,967 "
1919	17,416 "	5,154 "
1920	17,961 "	4,910 "
1921	18,748 "	3,539 "
1922	24,341 "	8,547 "
1923	28,475 "	11,256 "
1924	29,411 "	12,027 "
1925	31,779 "	12,458 "
1926	33,129 "	10,142 "
1927	39,057 "	15,748 "
1928	40,291 "	15,420 "
1929	43,521 "	15,529 "
1930	44,526 "	12,918 "
1931	47,832 "	12,816 "
1932	49,527 "	12,437 "
1933	49,807 "	13,175 "
1934	51,240 "	19,410 "
1935	50,673 "	19,280 "
1936	57,080 "	26,240 "
1937	54,361 "	20,993 "
1938	57,047 "	21,814 "
1939	62,942 "	25,929 "
1940	58,933 "	21,507 "
1941	57,670 "	20,716 "
1942	56,727 "	19,496 "
1943	55,766 "	14,461 <sup>1</sup> "
1944	56,742 "	12,840 "
1945	60,313 "	16,287 <sup>2</sup> "
1946	62,764 "	19,886 "
1947	68,160 "	24,132 "

<sup>1</sup> From 1943 provision was made in the accounts for the dividend (less income tax) on the ordinary shares, consequently the net balance on the General Profit and Loss Account is reduced, as compared with the years prior to 1943, by the amount of the tax on the dividend.

<sup>2</sup> In 1945, the balance of the arrears of dividend on the ordinary shares was paid out of the carry forward on profit and loss account and reserves.

## § 4

Although the directors of Letchworth did not anticipate the rapid financial success of their venture, they very soon came to the conclusion that the company's annual accounts did not correctly represent the actual progress of the scheme. In their second annual report, dated January 1906, they said: 'The accounts do not convey an adequate impression of the rapid and substantial progress which the company has made during its two years' operation.' And again, in 1907, they said: 'The accounts show an apparent loss of £5,575 16s. 1d. on the year.' The total adverse balance at that date, as shown by the accounts made up to 30th September 1906, was £13,288, after three years working. This bothered them exceedingly and was a hindrance to getting the further capital on which they depended. With a view to arriving at a true statement of the position, the directors instructed the well-known valuers Drivers, Jonas & Co. and H. Trustram Eve (afterwards Sir) to prepare a valuation of the estate. This valuation showed that the land and the buildings on it belonging to the company were worth, in September 1907, £379,500. The total expenditure, including the price paid for the property and the expenditure on gas, water, electricity, highways, sewerage, general development, and preliminary expenses, amounted to £265,831 0s. 4d., so that the valuation showed an appreciation of £113,668 19s. 8d.. This, the directors believed, showed the real position, and though they could not employ the increment for the purpose of paying dividends (it not being a realized profit), they introduced the amount of the valuation in the accounts in place of the actual expenditure (having taken counsel's opinion on the matter), and wrote off the adverse balance on the revenue account, £16,621 13s. 5d., carrying forward the balance of the increment amounting to £97,047 6s. 3d. The amount deducted from the valuation to arrive at the increased value included expenditure on the water, gas, and electricity undertakings, though as these undertakings were not included in the valuation the expenditure upon them should not have been deducted. The increased value was therefore greater by £37,365 (the amount spent on these works) than the amount shown in the accounts: the commercial value of the undertakings was at least equal to the expenditure upon them, if it did not exceed that amount.

From 1908 to 1910 the company continued to show losses on its revenue account, and in 1911, when it appeared that the period of revenue losses had definitely come to an end, the directors wrote off the further losses to date, together with certain other expenditure, amounting in all to £20,452 19s. 9d., against the increase in value of the property, leaving a balance of £76,594 to be carried forward in the accounts; the amount has since been reduced by subsequent writings off to £46,212. It proved to be a rather useful item in the accounts. In 1912 the directors were induced to make certain changes in the accounts, and in explaining those changes they made the following statement in the report for the year ended 30th September 1912, the report being dated 21st January 1913:

It will be seen that the net profit of the company for the year is given as £3,086 12s. 2d.; for the year previous a net profit of £174 14s. was shown. It is, however, only right at once to point out



that the two figures do not correspond, inasmuch as there has been this year a very important change in the presentation of the company's accounts. Shareholders will remember that, in the first seven of the nine years of the company's operations, the accounts showed net losses on revenue account; but the directors always maintained that these losses were only apparent, inasmuch as they were far more than counterbalanced by the increased value of the estate. This year the directors, with the concurrence of the auditors, and fortified by the legal opinion of Sir Francis Palmer, the eminent authority on company law, have written to development account certain considerable expenditure, amounting to £2,354 2s. 10d., which, according to the system of accounts followed in previous years, would have been charged against revenue. These items were not incurred for the purpose of carrying on the estate as a going concern, but with a view to its future development. In the early years of the estate it was probably wise to charge such items to revenue account, but now that the future of the estate is beyond doubt, it would be an excess of caution to continue to do so, and would only give a false view of the result of the company's operations. It would, in fact, be robbing the revenue account each year, in order to build up an ever-increasing surplus of assets over liabilities. That surplus, it will be remembered, is already £76,594, as shown by the valuations of 1907 and 1911.

It is, however, the intention of the board, before paying any dividend, to have a revaluation of the company's property made, and if that revaluation—as they confidently expect—shows a further increment of value produced by their operations, in addition to the increment shown in 1907 and confirmed in 1911, they will write off the development account against part of such new increment, and then proceed to pay a dividend out of the accumulated profits of revenue account. The directors hope to be able to fulfil the expectation held out in their last report by paying a dividend of  $2\frac{1}{2}$  per cent on shares in two years from the present time, possibly even sooner.

In an ordinary trading company it is comparatively easy to keep expenditure on capital account distinct from expenditure on revenue account; in the development of a new town the problem is more complicated. Besides expenditure represented by bricks and mortar, and other tangible things, there is much expenditure necessary for development, which, while yielding an increase in capital value, is not represented by additions such as buildings. This kind of expenditure is properly dealt with by putting it to a development account, and writing it off when it has been proved by a revaluation that it was wisely and profitably made. The company has, of course, always had such a development account; the only difference is that the point has now been reached when the caution shown in the past would be unnecessary and undesirable. The directors have contemplated some such change as the above for several years, and they are satisfied that the net profit now shown does not in any way overstate the actual profit of the company during the year, but, on the contrary, is well within the facts, seeing that they have still charged to revenue account considerable sums which have been expended for the purpose of developing the estate, and which, therefore, they might have charged to development account, according to the legal advice they have received.

The expenditure referred to in the above quotation was advertising, a proportion of London and Letchworth office expenses, a proportion of law charges, and a small amount for interest on money borrowed for certain specific works whilst under construction. The action taken so cautiously in 1913 shows the difficulty in which the company had been since its inception.

That difficulty arose out of the very nature of the undertaking and is worth some attention. The expenditure of the company fell under three main heads:

- (a) Construction of works such as roads, sewers, waterworks, etc.
- (b) Lay-out of plots and creation of ground-rents.
- (c) Maintenance of properties and collection of revenue.

The first item was clearly capital expenditure, and there was never any difficulty about treating it as such; the third item was also clearly a revenue payment. The expenditure

falling under the second head was not so easily dealt with. Some part of it was charged to a general development account, which up to 30th September 1912 reached a total of £16,067, and was made up as follows:

	£
Fees to consulting architects and surveyors, etc. . . . .	2,992
Proportion of surveyor's office salaries and expenses . . . . .	4,784
Legal expenses . . . . .	4,720
Fencing plots, levelling sites, etc. . . . .	2,964
Promotion expenses of cottage building company . . . . .	359
Expenses <i>re</i> unification of parishes . . . . .	50
Land given for school site . . . . .	198
	<hr/>
	£16,067

But all the rest, including the whole of the salaries of the staff and office expenses (except the proportion charged above and a proportion of the engineer's salary already charged to engineering works), costs of advertising, legal charges, and so forth, was charged to the revenue account. That expenditure was 'not incurred for the purpose of carrying on the estate as a going concern, but with the view to its future development'; it was, however, considered to be an expense that should be met out of rents received and other revenue. Part of this expenditure, though by no means the whole of it, for the company 'still charged to revenue account considerable sums which have been expended for the development of the estate,' was in 1912 charged to the development account for the first time, and, two years later, this change of practice enabled a dividend to be paid.

When, therefore, the question is asked, Why did Letchworth take so long to pay the dividend on its share capital? the answer must be, at least in part, Because the revenue account was made to bear throughout the history of the company (though to a decreasing extent) expenditure incurred for the development of the estate which should have been charged to capital account. Further, the company was financed from the start on borrowed money. Two-thirds of the original purchase price of the estate was borrowed, and development was largely financed by mortgages, debentures, and other borrowings. On the whole of this borrowed money interest was paid, and the whole of the interest (with the exception of a very small amount from 1912 onwards) was charged to the current revenue account. Now, it is apparent from even a slight study of such an enterprise as that of a garden city that, if largely financed by loan capital, it is impossible to pay current interest on borrowed money out of the current revenues in the early years of the concern. When it is considered that the Letchworth estate showed a net return of something just under 2 per cent at the date of purchase in 1903, and that the greater part of the cost was borrowed at 4 per cent, it is obvious that at the very outset the revenue must fail to meet the interest; and as development proceeded and capital was sunk in works which could only be made profitable over a long period, revenue became for a time even more incapable of meeting interest charges, and greater losses than ever were inevitable. Yet those losses were not real losses, as the directors perceived and pointed out. For the activities of the company, the amalgamation of the various properties and the constructive

work that was proceeding, improved the value of the property to the extent of a much larger sum than the total of the expenditure upon it. If the interest had been stationary, or if revenue could have been increased at a greater rate than the increase of interest, the burden of interest would not have mattered so much because it could have been easily borne. But as it was, interest increasing yearly in amount exhausted the revenue for a long period, and caused the undertaking, judged by the accounts, to present a poor result. To the extent that interest, and the expenditure for development purposes charged to revenue, were written off against the increased value of the estate (as was done in 1907 and 1911) the revenue account was relieved, but the method adopted was imperfect; for this expenditure having passed into the revenue account had absorbed the profits already there, and the amount subsequently written off against the increased value was correspondingly less. The result of this was that the revenue account at the end of 1911 showed no balance, whereas if the expenditure referred to had been placed to a separate account the revenue account would have shown a considerable balance of profit at that date.

## § 5

The nature of any business is an important, if not the deciding, factor in considering its finance. The business of a garden city company is to create a new town on an agricultural area. The land is not sold, but leased. Therefore, in developing the town the company is creating revenue in the form of secured ground-rents. Capital is sunk in expenditure upon land and development which produces revenue as the finished product is leased. The business is therefore quite different from that of the ordinary land developer, who sells the freehold as fast as his expenditure creates building land. His sales provide the money to enable him to go on developing, and he needs comparatively little capital because he is always getting back his original expenditure and more. Letchworth having been developed as it was developed, more and more capital was needed as the town grew. None of the proceeds came back as fresh capital. The company's land was not stock, as the land developer's land normally is, possessing the characteristic of all stock that it should be got rid of as rapidly as possible; nor was it subject to the tradesman's principle of small profits and quick returns. It was a fixed asset, held for its income. This fact would have justified the directors in adopting at the first and to the fullest extent the principle of dealing with expenditure that they acted upon to a partial extent in 1912 and have followed since.

Had the whole of the expenditure directly or indirectly incurred for the purpose of the development of the estate been charged to capital account, and had the interest on unremunerative capital expenditure been charged to capital account or held in suspense, the revenue account would have shown a profit from the very start, and the 5 per cent dividend on the ordinary shares would have been reached at a comparatively early date. Indeed, it may be said that a more enlightened method of dealing with the accounts would have saved the undertaking from many difficulties and would have prevented the



disheartenment of the directors which was reflected in the speech of the late Aneurin Williams when he announced his resignation of the chairmanship of the company at the annual meeting in 1915. He said at the conclusion of that speech:

We set out to create not a pleasant place of residence for the well-to-do, nor even a garden suburb, to which the working people of some old city should return at night, and in which they should live under good conditions, but a model town—a garden city—with industries, shops, cottages, villas, public and private gardens, and an independent municipal life of its own. To a considerable extent we have proved that it can be done; indeed we have done it, with admirable effect on the life of the inhabitants, especially of the working-class inhabitants. But we have not yet proved that it can be done quick enough to afford as great a public lesson as it should, and to pay a modest interest on the capital invested in it. Until it does this last, it will not be considered, and will not deserve to be considered, practical politics by our fellow countrymen, and its example will not be followed as it ought to be, and must be.

The position of the scheme, however, was much better than it was believed to be, and, though progress was undoubtedly slow, the accounts, as the present writer has endeavoured to point out, showed an unnecessarily unfavourable result.

Had the whole of the capital on which Letchworth was developed been share capital, and had the proper apportionment of the general expenditure on development been made to capital account, leaving as a charge against revenue only those items which were due to the maintenance of the property and the collection of the revenue, the undertaking would have shown profits that would have justified a small dividend the first year, and within a year or two the full 5 per cent.

## § 6

As already stated, the company reached the maximum dividend allowed by its constitution in 1923; that dividend could have been paid at an earlier date out of accumulated profits, but the board considered it better to wait until the profits for the year were sufficient for the purpose. The payment of the accumulated dividend has also been made. It was always the declared intention of the board to pay the dividend gradually out of the balance of profits remaining from year to year after paying the current dividend, clearing up each year's arrears in turn. On various occasions the proposal was made that the accumulated dividend should be converted into stock. The late Aneurin Williams referred to the matter at the annual general meeting of the company in 1922 as follows:

I do not think that we need contemplate the necessity of paying all that out in cash. My own belief is that the whole of that, and probably a good deal more, is represented by the surplus assets of this company, and that it ought to be possible to convert these arrears into a stock of some sort, before very long, as against the assets of the company, and pay dividends on that stock out of the growing revenue of the company.

In 1923 the directors took counsel's opinion on the question of distributing the accumulated dividend in the form of shares, such shares being created out of the surplus value shown by a valuation of the property, but were advised against it. Other proposals

were made from time to time, but were considered impracticable. Yet the amount of the arrears and the note on the balance sheet drawing attention to them worried the board, and it was with relief that in 1946 the arrears were paid. When making the announcement to the shareholders, the chairman, Sir Eric Macfadyen, said:

While the company has met to the full every other liability it has incurred, it has continued to be in default on this moral obligation to its original shareholders as distinct from those who put up their money after the company had reached the dividend-paying stage. I use the word obligation because the ordinary capital of First Garden City is not an equity holding, the investor in which, to compensate him for what at the time these shares were issued was regarded by financial pundits as a very real risk of losing his money, might look to share in any profits that might be made: our 'ordinary' shares for all practical purposes are cumulative preference shares. Shareholders have subscribed, in fact, on the footing that their money might be lost altogether but could not in any event earn more than 5 per cent per annum: this no doubt because it was the intention that surplus profits, in excess of that moderate return, should inure for the eventual benefit of the town of Letchworth. The holders of these shares have shown exemplary patience and have not pressed their claims to the embarrassment of the company or to the detriment of the town. To my colleagues and myself it is a matter of great satisfaction that the time has now come when the long-standing obligation represented by these arrears can be honourably discharged. Profit balances accumulated out of the earnings of past years being now available for the purpose, those who are to benefit are entitled to a settlement at this stage of the company's history

## § 7

One consequence of the method of treating as a charge to revenue expenditure what was really part of the cost of development, was that the costs of development were not ascertained. The company therefore was not in a position to know exactly what its position was at any given time (though the valuation was a rough guide), nor what return its ground-rents were showing. Calculations made by the present writer on such data as were available, covering the period from 1905 to 1915, may be of interest, though they have no bearing on present-day figures of cost. The real development expenditure each year was arrived at as nearly as possible, and was apportioned over the area developed and the area to be developed (that is, the complete town area) with the following result:

<i>Year</i>	<i>Area Devel- oped each Year in Acres</i>	<i>Development Cost per Acre <sup>1</sup></i>	<i>Year</i>	<i>Area Devel- oped each Year in Acres</i>	<i>Development Cost per Acre <sup>1</sup></i>
		£			£
1905	274.3	85	1911	13.0	320
1906	49.1	140	1912	27.6	355
1907	65.1	185	1913	38.0	345
1908	25.4	240	1914	7.7	352
1909	28.9	260	1915	32.1	340
1910	21.2	276			

The areas and figures, it should be remembered, are approximate. The low cost in the first few years is partly explained by land being developed on existing highways. Succeeding years had to bear not only the current expenditure on roads and sewers, but a proportion

<sup>1</sup> These figures exclude the cost of the land.

of the cost of past development of a general character, plus interest on borrowed money. That the interest paid on borrowed money expended on development should be treated as part of the cost of development until the land is disposed of is necessary to the finance of land development as carried out at Letchworth. Whether those payments of interest are ultimately met out of future revenues or out of capital is immaterial. For practical purposes the interest should be treated as an element in development costs; and unless the capital values created can cover interest during the period taken to create them the financial position is bound to be unsound. In the Letchworth accounts, as we have pointed out on an earlier page, interest was automatically charged to revenue account, and one result was that its effect upon costs was overlooked. In the figures given above interest is included for the reasons just stated. In those figures the expenditure on development in any given year (apart from roads and sewers) having a bearing on the whole town area was apportioned over the whole area, not wholly charged on the actual developed area. This meant, of course, that a certain amount of expenditure was carried forward each year. It is worth recording that a considerable area of the land developed in the first few years remained undisposed of even as late as 1915. At the end of that year there were in hand 188 acres developed but unlet. Some of this land was subsequently disposed of at a high figure, but while it remained in hand its 'cost' was steadily increasing, not only by the amount of the interest upon it but also by a proportion of the general development expenditure. To the foregoing figures must be added the cost of the land. The total original cost of the estate was approximately £47 per acre over the whole area; but as a large part of the land was to be retained as an agricultural belt, upon which a reduced return was to be expected, the written-down value of the agricultural land must be added to the cost of the town area, so that the figure should be taken at about £94 per acre, and that sum should be added to the figures given in the above table to arrive at the total cost of land and development at each period.

The areas of land disposed of in the years covered by the same figures can also be given. 'Land disposed of' means land let on building lease, let on short agreements, occupied by the company's works or other buildings, or sold. Leases or agreements for land in the agricultural area are excluded.

<i>Year</i>							<i>Area of Land disposed of each Year in Acres</i>
1905	.	.	.	.	.	.	117.6
1906	.	.	.	.	.	.	62.3
1907	.	.	.	.	.	.	52.5
1908	.	.	.	.	.	.	28.2
1909	.	.	.	.	.	.	22.3
1910	.	.	.	.	.	.	26.3
1911	.	.	.	.	.	.	25.4
1912	.	.	.	.	.	.	26.7
1913	.	.	.	.	.	.	17.2
1914	.	.	.	.	.	.	12.4
1915	.	.	.	.	.	.	15.3



The following summary of the number of building leases created in the period from 1904 to 1915 is interesting:

*Residential Sites*

<i>Years</i>	<i>No. of Leases</i>	<i>Area</i>	<i>Annual Ground Rent</i>	<i>Average Annual Ground Rent per Acre</i>
		<i>Acres</i>	<i>£</i>	<i>£</i>
1904-1907	424	135.158	1,933	14.3
1908-1911	183	50.241	1,117	22.2
1912-1915	88	18.731	483	25.8
	<u>695</u>	<u>204.130</u>	<u>£3,533</u>	<u>£17.3</u>

*Industrial Sites*

		<i>Acres</i>	<i>£</i>	<i>£</i>
1904-1907	9	22.157	232	10.5
1908-1911	13	17.571	330	18.8
1912-1915	7	14.763	360	24.4
	<u>29</u>	<u>54.491</u>	<u>£922</u>	<u>£16.9</u>

*Workmen's Cottage Sites*

<i>Years</i>	<i>No. of Leases</i>	<i>Area</i>	<i>Annual Ground Rent</i>	<i>Average Annual Ground Rent per Acre</i>
		<i>Acres</i>	<i>£</i>	<i>£</i>
1904-1907	55	38.540	593	15.4
1908-1911	18	22.611	476	21.1
1912-1915	21	25.031	548	21.9
	<u>94</u>	<u>86.182</u>	<u>£1,617</u>	<u>£18.8</u>

*Commercial Sites*

		<i>Acres</i>	<i>£</i>	<i>£</i>
1904-1907	46	6.419	304	47.3
1908-1911	21	2.174	127	58.4
1912-1915	13	1.451	95	65.5
	<u>80</u>	<u>10.044</u>	<u>£526</u>	<u>£52.3</u>

*Public Building Sites*

		<i>Acres</i>	<i>£</i>	<i>£</i>
1904-1907	1	3.000	18	6.0
1908-1911	5	1.341	55	41.0
1912-1915	5	1.448	59	40.7
	<u>11</u>	<u>5.789</u>	<u>£132</u>	<u>£22.8</u>

It should be borne in mind that the figures in the above tables relate to the past and are not reliable data for to-day; there are, however, lessons to be learned from them and they provide a basis for pertinent questions, the answers to which are indicated on various pages of this book.

## § 8

In addition to expenditure on development, the company had to spend considerable capital on the supplies of water, gas, and electricity. These businesses form a valuable part of the enterprise, but apart from these three important undertakings, the company has never seriously embarked upon subsidiary enterprises. At one time or another various undertakings were started but with one exception were given up; among them were included a nursery, an omnibus service, coal distribution, a building organization, a herd of dairy cattle, and the farming of some of the company's own land; a hotel is retained. Trading enterprises were, however, never regarded with enthusiasm, and in announcing that the last of them was to be disposed of the directors said in their annual report (December 1921): 'A loss (on farming and dairy farming) has been incurred during the year, which has confirmed the view already held by the board that it is better to dispense with subsidiary undertakings, where possible, so as to enable the staff to concentrate their whole energy on the development of the town and the main business of the company. The directors are therefore taking steps to dispose of the farming stock and to let the land now farmed by the company.'

The nationalization of the electricity undertaking is a serious blow to the company as this was by far the most important of the subsidiaries. Its contribution to the general profit and loss account for 1947 was no less than £45,662 out of a total of £96,734. As the total compensation had been agreed at £1,129,858, the company was paid partly in British Electricity stock, £675,000 (which was sold), partly in repayment of bank overdraft and mortgages, £357,824, and £97,034 in cash. The surplus over the book value of the undertaking was £268,814, which the company placed to a capital reserves account. Thus a valuable revenue-producing asset has been lost, the immediate effect of which will be to reduce the company's general volume of business and its yearly revenue balance. In his circular letter informing the shareholders of the arrangement, the chairman, warning them of the consequential reduction of the company's net profits, said that 'the full maintenance of the profit balance shown in the accounts for recent years would imply expansion in other sources of revenue which it may take some time to attain.' What those sources of revenue may be is not disclosed; but that they exist in the company's undertaking there can be no doubt. It is no part of the writer's object to suggest how the company should employ its new resources to strengthen its position and to hasten forward the development of the town. Certainly a building organization and programme are called for; but it is impossible not to point out that there should be activities in new directions.

Another serious loss of the same kind will be suffered when the gas undertaking is nationalized. The effect of these successive blows upon the financial position of the company is highly disturbing, but perhaps the ultimate effect will be to reinvigorate the entire undertaking.

## § 9

The original economic basis of the garden city was the so-called 'unearned increment,' the supposition that the laying out and development of a town upon land purchased at agricultural value would yield a value over and above the total expenditure upon it. As a distinctive feature of the garden city scheme is the intention that this unearned increment should be secured for the benefit of the people living upon the land, the question of land tenure is of importance. In a pamphlet issued by the Garden City Association in 1901, before the Letchworth garden city was founded, it was said:

The whole question of rents and the nature of the tenure to be established in Garden City is one of some difficulty; but the association will seek to secure a form of land tenure which will afford the greatest possible encouragement to individual enterprise, while at the same time securing to the community the large increment which must inevitably arise as the area is converted from a rural into an urban one. As a matter of course, the best expert advice will be taken before any definite decision is come to on these points.

When the Letchworth estate was purchased, the tenure on which the land should be disposed of was actively discussed, and various suggestions were put forward to ensure the unearned increment being reserved for the community. Howard's idea, as expressed in his book, *Garden Cities of To-morrow*, was a system of rate-rents, which he defined as follows:

That part of the rent which represents interest on debentures [on the original purchase price] will be hereafter called 'landlord's rent'; that part which represents repayment of purchase-money, 'sinking fund'; that part which is devoted to public purposes, 'rates'; while the total sum will be termed 'rate-rent.'

The amount of the rate-rent would be arrived at 'by competition among the tenants,' an assessment department being formed whose business was thus described:

This department receives all applications from would-be tenants, and fixes the rate-rent to be paid—such rate-rents, however, being fixed not arbitrarily by the department, but upon the essential principle adopted by other assessment committees—the really determining factor being the rate-rent which an average tenant is found willing to pay.

In other words, the land was to be disposed of at the market price. The idea was ingenious and Howard was much attached to it. Could the company have seen any way by which effect could have been given to it, the board would doubtless have accepted it, for all the directors were land reformers; but there was no apparent way, and the proposal that was considered by the company to give effect to Howard's idea was that land should be held on 100-year leases, paying (1) a fixed ground-rent representing a fair proportion of the purchase price of the land and the expenses connected therewith, and (2) a rate-rent representing the cost of the public services, revised from time to time by a committee of nine members elected by occupying leaseholders. These suggestions, interesting enough in themselves, protected neither the interests of the garden city company nor those of lessees; for the return that the company would be likely to receive would remain uncertain, which would have affected its credit, and the amount payable by the lessee would have been equally uncertain, which would have prevented his



obtaining capital for building. It was therefore finally decided that the people coming to Letchworth should be offered land on terms similar to those to which they had been accustomed elsewhere, and ordinary building leases for 99 years were granted, as well as leases containing a provision for revision of the ground-rent every 10 years on the then value of the land apart from the improvements of, and buildings erected by, the lessee. Very few of the latter leases were granted, as the undefined amount of the future liability for ground-rent was a fatal obstacle to their adoption, in spite of the fact that the original ground-rent was less under this form of lease than under the other form. Later on, leases were granted for 99 years, renewable for a further period of 99 years at a revised rent; for 999 years at a rent revisable every 99 years; and, for factories only, for 999 years at a fixed rent. Agricultural land is let on the usual yearly agreements or for longer periods as arranged. The freehold is not disposed of except to public authorities for public purposes, to churches, and to such bodies as the railway company for the purpose of their undertakings.

The question of the relative merits of disposing of the land on leasehold tenure as compared with the sale outright of the freehold was thoroughly discussed. A memorandum was issued to the shareholders in April 1904, in which the matter was set forth as follows:

The garden city company, in proposing to found a new town for industrial and residential purposes, is not entering into a land speculation; it does not desire to reap for itself the profit which will accrue from the conversion of agricultural land into building land, and from mere building land into the site of a well-developed town, and it has carefully deprived itself and its successors of the power to do so. The articles of association of the company provide that all profits beyond a cumulative dividend of 5 per cent, which is regarded as a fair return to the shareholders, shall be used for the benefit of the town and its inhabitants. As the profit, therefore, cannot be retained by the company, it will go to the tenants in one way or another.

Under these circumstances it is obvious that for the sake of the tenants themselves, as well as in order to secure the fulfilment of the objects of the company, it is desirable to apply the most equitable conditions of land tenure possible both in respect of public and private interest. This can only be accomplished if the company in the first place maintains the full control of the development of the town, and in the second place adopts the system of tenure which will secure, as far as possible, under the established laws and customs of the country, that the increase in the value of the land shall benefit those who create it. As the greater part of this increased value is due to the social activities as a whole (i.e. in their collective capacity), it is in this capacity that they should receive the benefit, and not as private individuals.

In order to secure these ends it is considered preferable to adopt a leasehold system of tenure. . . .

It is further to be borne in mind that the rents paid by tenants are not absolutely outgoings as rents ordinarily are, but a considerable proportion will be available for purposes which are paid for in existing towns out of the rates. Moreover, the actual cost of public services will, it is obvious, be less in a city planned from the beginning, and the land of which has been bought at agricultural value, than in ordinary towns where public services are carried out only after land, still in private ownership, is at a high price and numerous vested interests have grown up. Putting these two facts together, it does not appear too sanguine to expect that as soon as there is a thriving town on the garden city estate, no rates will be needed, the rents providing ample to cover all public services, and as the profit which prospective tenants may hope to derive will depend upon the success of the company in securing the rapid establishment of the town, it is hoped that intending settlers will recognize that their interests are in common with those of the company.

A secondary reason for adopting the leasehold system was the practical one of enabling the garden city company to retain control over the property. Such control was an essential part of the scheme, for without it the maintenance of the garden city, its character and amenities, would probably prove difficult if not impossible in time to come. Under a lease the company could exercise control which would be impossible under the covenants in a conveyance of the freehold. For positive as well as negative covenants could be enforced under a lease, which could not successfully be done otherwise. Covenants under a lease can be enforced by the simple remedy of re-entry; but covenants in a conveyance can only be enforced by action in the courts or by an injunction, and positive covenants, such as to repair, to cultivate gardens and so forth, could not be made to run with the land and become binding on all owners into whose hands the land might fall. The leasehold system, it could therefore be claimed, was better than freehold to the extent that control exercised by the company gave security to leaseholders generally. One effect of the leasehold system upon the scheme was that the company needed a larger amount of capital in one form or another than it would have required had freeholds been sold for cash. Neither could the company sell its ground-rents, for by so doing it would have lost control over the property.

In addition to the element of control, the company was, of course, influenced in adopting the leasehold system by the primary desire to retain the unearned increment for the community. That desire would have been fully realized had the system of leases at revisable rents been found workable; but the granting of 99-year leases, and still more 999-year leases, gave to the lessees such part of the unearned increment as exceeded the amount of the ground-rent. The unearned increment, to the extent that it was to be secured by the company, had to form, therefore, part of the ground-rents created.

## § 10

When the ground-rents were originally fixed they were intended to have some relation to cost. The idea of getting the maximum market price, though not, it seems to the writer, inconsistent with the ideas in Howard's book, did not altogether commend itself to the promoters of Letchworth. It is true that no one could say beforehand what the market price of the land was likely to be; for the company had to create its market. But it seems as though the promoters were influenced by the desire not to overcharge the public. Attempts were made at various times to ascertain what should be the proper price for the land. Calculations were made of the estimated direct and indirect costs of producing the land; but while all these estimates pointed to a higher price being charged than the company was actually asking, they were not used to lay down any definite basis. Nor, indeed, could any satisfactory basis be arrived at by such means. The value of land is what a purchaser will pay for it in the market, and what the garden city company should have done at a much earlier date than it did was to cultivate its market, develop

its market values, obtain in that way the maximum price, and so secure the current 'unearned increment.' There was something to be said, of course, for disposing of land at a low price in the first few years with a view to attracting a population; and the low initial ground-rents may be explained in that way; but it meant the surrender by the company (though a reasonable surrender) of the unearned increment on those plots. As the town grew, the company gained the ability to set a higher standard of ground-rent, and it was undoubtedly in the interest of the undertaking as a whole, and in conformity with its fundamental social aims, that the highest market price for the land should be secured.

### § 11

The term 'unearned increment' in the sense in which it is normally used can hardly be applied to a garden city scheme. The increment that arises to the developing body in a garden city from the lay-out and development of the town is as fully earned as any profit or benefit could possibly be. The increased value of the land does not arise from the mere passing of time (though that is an element) or from the natural increase of population upon it (though that too, has its effect); it does not arise from the accident of its position, or from anything done by the community. It is due wholly to the preparation of the plan, to the skill, foresight, and ability of those who carry out the scheme, and to the getting together of the community, all of which is undeniably the work of the promoters. That the profits of such an enterprise, so far as they can be enjoyed by the promoters of the enterprise, are not extravagant and that they may accrue slowly, Letchworth has proved. The increment that is brought into existence in a new town is, we assert, altogether different from the profits that are made by speculators when a new highway is made or a new railway laid down, or when the character of land is changed by reason of industrial development or some other cause. It is different, too, from the increased value that arises when landowners do nothing but await events. It is directly the result of the scheme. That the 'unearned increment' belongs of right to those who create it rather than to landowners and speculators who have hitherto grown rich upon it was part of the case on which the promoters of the garden city based their scheme, and they intended by demonstration to provide a practical means of showing how the increment could be publicly secured. The fundamental idea of the garden city was to obtain for the community the increment brought into existence by its presence and from its activities upon the land on which the community lived.

From time to time, ever since Henry George awakened the continents to the iniquities of land ownership, and what the public was losing in allowing the system of private ownership to continue, efforts have been made to appropriate the unearned increment, or some of it, for public purposes. After the garden city was established, a Liberal Government attempted to impose a land tax in the Finance Act of 1909, under which increment duty was payable on the assessed increment shown on the granting of



leases, and an undeveloped-land tax assessed on land fit for development. Had this Act been put fully into operation it would have crippled Letchworth and made the scheme unworkable. When the bill was before Parliament the directors (two of whom were Liberal members of the House) sent a circular to the shareholders as follows:

I am instructed to call your serious attention to the effect which the Land Clauses of the Budget, as at present drawn, will have upon First Garden City Ltd.

This company is, of course, non-political, and different members of its board are of different opinions as to the taxation of site values and the unearned increment of land. They, however, unanimously agree that the Budget as at present drawn will tax First Garden City Ltd. (and indeed many other land developers) very heavily, not on unearned increment, but upon the results of its own work and expenditure. This is, of course, a distinct violation of the declarations which have been repeatedly made on behalf of the Government.

The net result will be that the Budget will tax the company, as nearly as it can be calculated, to the extent of about £8,000 during the next five years; this will, it is feared, make it extremely unlikely that the company can show any profit whatever during those years.

It is clear that the whole increase in the value of the land at Letchworth is the result (direct or indirect) of the efforts and expenditure of this company.

The case is totally different from that of a landowner who merely holds land while 'socially created' value is being added to it by other people. The Budget, however, proposes to tax the company upon a large part of the increased value of its land, on the ground that it is indirectly and not 'directly' attributable to its expenditure, or that its expenditure to which it is attributable was of a revenue nature, and not of a 'capital nature.'

Unless garden city development can be shown to pay its way it becomes a mere toy; and it is difficult to see how Letchworth or any other garden city can ever pay its way if heavy taxes are to be levied upon what are practically gross earnings.

The board has tried its utmost to get the Government to realize the effect of their proposals upon the best type of land development, but without success. I am therefore instructed to call your attention to amendments proposed on the Report Stage by Mr. Idris, M.P., and Mr. Thomasson, M.P. One of these proposes to amend Clause 35 by exempting from the Land Taxes land owned

'by any body corporate recognized by the Treasury as working for public utility and not dividing any profit to its members other than a limited rate of interest approved by the Treasury in each case.'

This would, the directors do not doubt, give complete protection to the garden city undertaking. Failing it, the company would at least get partial justice by the adoption of other amendments proposed by the same two members, viz.:

(1) To insert in Clause 16 (2b) after the word 'sewers' (p. 13, line 38) the words 'or on draining, levelling, planting, or laying mains;' and (2) to omit the words 'directly' and 'of a capital nature' in Clause 25 (4a).

I am instructed to ASK YOU VERY URGENTLY TO WRITE TO YOUR REPRESENTATIVE IN PARLIAMENT AND ASK HIM TO SUPPORT THE ABOVE AMENDMENTS. For this purpose I enclose a spare copy of this letter.

Finally I am to say that the board are not in any way objecting to pay tax on unearned increment. If anything of the sort ever came to the company, they would very gladly hand over 20 per cent of it to the public. Similarly, they are not even objecting to being taxed upon the company's net profits, when the time comes that it is making a net profit.

This circular is put on record as a matter of history. The Chancellor of the Exchequer, D. Lloyd George, in bringing in his bill, said that the Government had guarded against anything destructive to garden cities, 'one of the best features in housing development in this country.' But there was nothing in the Act which protected garden cities; though,

as a fact, no assessments were ever made under it on any land at Letchworth while the Act was in force.

Now, at last, under the Town and Country Planning Act, 1947, in attempts to deal with the problem of compensation, which has been one of the greatest obstacles to town-planning in the past, to make a reality of the collection of betterment, long recognized in town-planning legislation but never found practicable, and to avoid land nationalization, a new system has been evolved. A 'development charge' is to be made upon land on which new building takes place. This is aimed at securing the betterment value arising from development, or, in other words, it is aimed at the unearned increment. How the charge is to be made is for the Land Board set up under the Act and for the minister to determine, and to what extent it will affect Letchworth has not yet been settled. It might bring the activities of the company to an end, or at least reduce them, because they would cease to be sufficiently remunerative. To any extent that the Act is applied to the garden city, it will reduce the benefits that the town should have gained from the company's enterprise, and in that degree it will nullify the value of the scheme. It would be possible to exempt the garden city from payment of the development charges on the ground that they arise directly out of the scheme and that the values are already secured for public purposes. Unless that is done, the imposition of the development charge will direct the so-called unearned increment into the national Treasury, while at the garden city it should be devoted to the local community. By converting rural land to urban uses, which is what the garden city does, the increment arises slowly, and is greater in the later stages, a point that ought to be borne in mind.

At the moment of writing, it does not seem possible to add to what has been said on this subject, except to repeat what was written in the first edition of this book, that in a garden city scheme, conducted by a company which acts as trustee for the future community, a system is brought into existence for enabling the benefits of increased land values to be socially enjoyed. That is done without disturbing vested interests, without injury or injustice to any one, by the mere organization of town life upon new sites, where the haphazard and wasteful methods that have made our old towns find no place. It is a more exact method of appropriating land values for the benefit of the community, and less disturbing to national and individual economy, than any method of taxation that has yet been devised.

## § 12

The following table shows the growth of Letchworth for the first twenty-one years in relation to the surrounding district, and indicates what an important factor it became in the local government finance of the area.

THE ASSESSABLE VALUE OF LETCWORTH COMPARED WITH THE TOTAL ASSESSABLE  
VALUE OF THE WHOLE UNION

		£		£
1903	{ Letchworth	1,051	Hitchin Union	158,095
	{ Norton	1,069		
	{ Willian	2,076		
1904	{ Letchworth	1,282	,,	178,324
	{ Norton	1,626		
	{ Willian	2,578		
1905	{ Letchworth	1,282	,,	178,324
	{ Norton	1,626		
	{ Willian	2,578		
1906	{ Letchworth	3,181	,,	185,807
	{ Norton	2,075		
	{ Willian	2,998		
1907	{ Letchworth	4,917	,,	185,737
	{ Norton	3,371		
	{ Willian	3,686		
1908	{ Letchworth	7,792	,,	194,854
	{ Norton	5,034 <sup>1</sup>		
	{ Willian	6,459 <sup>1</sup>		
1909	Letchworth	19,290	,,	198,219
1910	,,	24,821	,,	207,463
1911	,,	28,957	,,	213,797
1912	,,	33,245	,,	223,176
1913	,,	37,546	,,	229,988
1914	,,	42,668	,,	247,930
1915	,,	45,891	,,	254,170
1916	,,	41,423	,,	221,559
1917	,,	55,328	,,	265,006
1918	,,	59,944	,,	271,378
1919	,,	67,158	,,	280,804
1920	,,	67,255	,,	282,106
1921	,,	66,033	,,	245,247
1922	,,	64,953	,,	272,277
1923	,,	65,282	,,	284,294
1924	,,	65,620	,,	285,164

The above figures are those adopted for the purpose of the county rate. They are based upon the Schedule A assessments for income tax. They differ from the assessments made for poor-law purposes and for the district rate. The latter figures for the period are given below:

<i>Year</i>	<i>Gross Ratable Value</i>	<i>Net Ratable Value</i>	<i>Assessable Value for District Rate</i>
	£	£	£
1922	99,229	68,663	65,590
1923	106,636	74,277	71,334
1924	106,226	74,181	71,393

<sup>1</sup> The parish of Norton and part of the parish of Willian were transferred to that of Letchworth in 1908.



The net ratable values from 1927 onwards at ten-year intervals were as follows:

	£
1927 . . . . .	87,949
1937 . . . . .	135,925
1947 . . . . .	168,785
1948 . . . . .	156,937

The reduced figure for 1948 was the result of the elimination in that year from local rating of the nationalized transport and electricity undertakings.

For the year 1946-7 a general rate of 18*s.* 4*d.* in the £ was levied, of which 6*s.* 10¼*d.* was to meet the urban district council's requirements, 11*s.* 5½*d.* was for the county council, and ¼*d.* for the assessment committee. In 1948-9 the urban district council levied 6*s.* 5*d.* on its own behalf, and 13*s.* 3*d.* for the county council. A penny rate was estimated to produce £678 in 1946-7, and in 1948-9, £628.

## CHAPTER VIII

### CONCLUSION

But the way out of this impasse has already been shown. At Letchworth in Hertfordshire there has been carried out within the last twelve years perhaps the most successful and instructive social experiment of recent times. . . . The interests of national health demand that further efforts should be pushed on with all vigour.  
W. A. BREND, *Health and the State* (1917)

#### § 1

LETCHWORTH was not founded merely to provide good houses for a few thousand people and sites for a few factories, but to demonstrate what could be done by foresight and a proper regard for public interests to work out a system of orderly development for communities. The town should be studied as a national object-lesson in which for the first time principles of town-construction capable of general application were observed. The experiment remains unfinished, for the town is still in the making, and its future may easily be more significant than the past; but the town has its complete parts and the leading features of the scheme have been tested, so that more and more is to be gained from a thorough examination of it. In the preceding chapters of this part of this book an account has been given of the various stages in the growth of the place, and the position of the town and the garden city company, which has made the town, have been explained. The writer has invited the reader to look at Letchworth as it is, comparing it with the scheme that was originally put forward, and he does not think it unfair to claim that the town stands the comparison, that it provides a most valuable example of town-building, and that it proves without question the rightness of the fundamental ideas upon which it was founded.

#### § 2

Let us again call to mind what those ideas were. They were set out in a pamphlet issued in 1901, two years before the town was started, not in the form of deliberately reasoned principles but as objects to be aimed at:

The chief objects to be attained in garden cities are (1) to associate the means of living (employment) with the home of the worker by removing established industries to, or founding others on, new sites, and under conditions which shall secure the best attainable conditions of life in town and country; (2) to provide sites for the houses of the workers in proximity to such industries; and (3) to reserve (a) to the inhabitants of cities thus formed the increment of value which their presence will give to the sites, and among other benefits (b) the highest attainable physical and intellectual advantages of town life, together with the freedom and healthfulness of residence in the country—these being secured in the interests of the industrial, professional, and commercial classes alike.

Is it not true to say that Letchworth is a genuine embodiment of those objects, that it has established their practicability, and that in doing so it provides material by the aid of

which principles for future town-building may safely be formulated? It has shown, without question, that the planning and development of a town fit to live in, and providing adequate conditions for industrial undertakings, is a feasible project that has a sound financial basis. We should not be misled by the relatively slow growth of the town into thinking that there was some defect in the scheme. The position of the estate was not a specially favourable one; it possessed few attractive natural features, it was not very close to London, it was on a branch line of railway, and it must be remembered that the company was always hampered for want of capital, and, above all, that the scheme was unique, with no precedents to be followed, and with nothing to guide the directors in the course of their business. The ordinary methods of estate development, under which large areas of land are disposed of as quickly as possible at the best prices obtainable, could not be adopted. The town as a whole had to be thought out, and land developed for different purposes in different areas under such restrictions as the company felt bound to impose.

### § 3

It must never be ignored that the town was a private venture, undertaken in the public interest, without governmental support of any kind, and, apart from the people who devoted themselves to its building, owing nothing to any other source. As a pioneer scheme its promoters had only themselves to depend on. The undertaking ought to be regarded as in the nature of a colonizing enterprise, and for that reason Howard's evocation of the name of Wakefield in his book was justified.

At the same time it must be admitted that the directors had largely themselves to blame for the slow development of the town and the disappointments that they consequently suffered. From the start, the board was never sufficiently united upon a consistent policy of development to enable a programme to be carried out with the energy that was needed. The organization of the company was never complete. Indeed, it gradually became something in the nature of a policy for the company to do as little as possible, and when a certain stage was reached it seemed to be the intention to sit down, collect the revenue, and allow the town to grow by its own impetus. This inertia was, in the first instance, the outcome of acute differences among members of the board, but it became a settled habit. The directors were men of outstanding ability in their own spheres; but no single one of them knew enough about the business or was able to devote sufficient time to enter fully into the complex nature of the enterprise. The scheme, therefore, must be regarded as having developed to some extent under its own momentum, and by virtue of its own inherent good qualities.

At no time during the early formative years was the board able to solve the problems of the administration of the undertaking. The directors attended frequent meetings, some of them gave much time to the business, but none gave his whole time. It was, of course, a novel enterprise, and the varied business experience possessed by members of the board was not sufficient for the new business they were undertaking, and no one



got down to the actual requirements of the undertaking. The difficulties with which they were confronted were immense, of which the lack of money was the greatest, for it meant that they did not really know if they would be able to continue. Thus, they were handicapped in working out long-term organizational plans. Thomas Adams, the secretary, acted in a managerial capacity at the start; but he lacked ability as a manager, though he was hard-working, physically active, and devoted to the idea. He had to be replaced after two years, and W. H. Gaunt was made estate agent, in charge of the executive work of the entire undertaking. Gaunt came from Trafford Park, with the reputation of considerable industrial experience; but he showed no sympathy with the idealism of the directors themselves or of the early residents and he had no understanding of what Unwin had in mind, so that conflicts were immediate and serious. Thus, 'business' in the person of the company's chief official was arrayed against the 'ideals' of the residents, the expression of this antagonism reaching its high-water mark in the publication of the monthly magazine, the *City*, in which the activities of the company, 'Our Mutual Friend,' were subjected to friendly but biting examination. One of the directors of the company, who was also a resident, was one of the chief financial supporters of this publication. Of course, such conflicts were natural, and not without the possibility of fruitful results, for always and everywhere authority frowns upon originality and enterprise, and exists to be challenged. It was unfortunate, however, that authority appeared to be satisfied with a single function and failed in offering sufficient signs of vigour and enterprise to provide leadership for the town. There was a sense of confusion and disillusionment, and doubt that the company really intended to carry out its original aims, for which there was no justification. No more genuine group of people ever existed than the members of the board of the company; but they did not convince the residents through the officials they employed that they had but a single aim. Indeed, it is true to say that the community spirit was stamped upon. In fairness, however, we must go further, for the active carrying out of the enterprise of building the garden city and the administration of the undertaking, which altogether amounted to a complex affair, had inadequate provision made for it, with the result that all aspects of the company's work suffered. On the one hand there was never sufficient attack and energy in the effort to develop the town, and on the other hand the co-operation of the inhabitants was never secured.

One unfortunate outcome of the state of affairs that was brought about was that the garden city fell out of a foremost place in public attention. Indeed, to be frank, it was ignored. For example, the famous Land Report issued shortly before the first war had no more than a bare reference to Letchworth, and gave no indication that the garden city had the remotest relevance to the matters of housing and land reform so fervently discussed in the report. The scheme was given no attention in any government report. Even Patrick Geddes in his remarkable work *Cities in Evolution* (1915), though he had some good things to say of the garden city, was inclined to associate it with the garden suburb. The propagandist bodies such as the Garden Cities and Town Planning

Association and the National Housing and Town Planning Council did not direct attention to the garden city as of practical interest. This was indication of serious failure.

Yet despite all that may be urged in the way of criticism, we are bound to come back to the undoubted fact that the undertaking was a daring one, embarked upon under unfavourable financial conditions and in the midst of general doubt as to its practicability. As a private enterprise with no official support of any kind, it was wholly dependent upon the time, money, and personal backing of the directors, who worked with no prospect of (or even desire for) personal reward. That the directors showed genuine capacity in their initiation of the scheme, and rare courage in the manner in which they persisted in the endeavour to carry it through in the face of constant discouragements, cannot be denied, and to fail in admiration of these facts would be ungenerous.

#### § 4

Since Letchworth was started in 1903 the country has had legislation upon town-planning and discussion in abundance upon almost every aspect of the subject. In the steps towards that legislation, and in all the subsequent discussions, the achievement of Letchworth has played an important part. We have had a vast amount of housing undertaken throughout the country, upon all of which the influence of Letchworth has been felt. Yet the characteristic feature of Letchworth, the fundamental principle of the scheme, of which town-planning and improved housing are but the incidental details, has remained but little understood. The praise of Letchworth became a cliché, which writers of every party, school, and opinion used for years on every possible occasion; but until 1920 Letchworth stood alone, and with none but a few people concerned with its real character. To-day, forty-five years after the garden city was started, the position has changed. The building of garden cities has become natural policy. They are not called garden cities, but the new towns to which the Government has committed itself are nothing else. They owe their existence to Ebenezer Howard and to the first experiment at Letchworth. How conscious the company is of this fact was indicated by the acting chairman, Mr. Ralph T. Edge, in his speech to the shareholders on 3rd February 1949, when he said:

Looking back over the history of the company, one cannot fail to be struck by the astounding grasp the founders of the company had of the basic essentials for the community which they planned. One by one their ideas have been adopted by successive Governments in power since the inception of Letchworth: use and density zoning; tree-lined roads; control of architectural design; new towns fully planned in advance; and finally the appropriation of the increase in land values, resulting from development, to the community and not to the individual. In so far as this company is in essence a corporation carrying out a public duty, we have been operating for many years in our own sphere on exactly the same lines as recent legislation authorizes the Government to operate for the country as a whole. But there is a sad difference. We had hoped that the growth of prosperity would have enabled us to devote increasing sums to the improvement and beautifying of Letchworth, and to the supplying of want and needs which

were beyond the limits of private generosity or outside the scope of public authority. That dream of localized benefit has substantially gone, but a great work still remains to be accomplished.

The position of Letchworth in relation to the powers given to the Minister of Town and Country Planning under the New Towns Act has already been raised. In January 1948 the urban district council passed a resolution, with one abstention, requesting the minister to set up a development corporation under the Act. A deputation from the council was received by the minister in March when the council was told that under the present difficult conditions in carrying out development the minister would not be able to reach a decision for some time. The reply indicated that the minister was ready to consider the matter.

The council's reasons for making the request were said to be mainly financial. Faced with heavy expenditure on building and sewage works, among other matters, the help that could be given by a development corporation was required, and the council rightly considered that Letchworth ought to have priority in building permits and be completed before new towns that were started later.

No prior consultation took place with the garden city company, however, and everything depended, from the company's point of view, upon how the minister considered the Act could be applied to Letchworth. Had he decided upon taking the completion of the town out of the hands of the company there can be no doubt that the company would have regarded it as a serious injustice. It appears, however, that the minister has come to the conclusion to allow the company to carry on with the development of the town, for in the speech of the acting chairman, referred to on the previous page, the latter said:

Some months ago he [the minister] asked the directors to go and see him, and he told us that he had decided that, subject to the acceptance of certain conditions, the company was a suitable body to complete the development of Letchworth.

The position has not been clarified at the moment of writing, but it is satisfactory as far as it goes, for every one will agree that the company ought to be allowed to complete its work. This will require the backing of the Government, subject to carrying out the minister's wishes. A big responsibility will be thrown upon the board of the company, for it will be placed in competition with the minister's own development corporations, and in view of the start the town has had its rapid development will be looked for. Much will depend upon what the minister will in fact do to meet the needs of the company and the district council too. For the first time in its history the company has considerable cash resources, due to the enforced sale of the electricity undertaking, and will be able to carry on building and development on a large scale if it is allowed to do so. It is clear from the acting chairman's speech that the board has this in mind, for reference is made to the fact that 'the company may find it desirable to undertake a considerable amount of building on its own account.' But a good deal of Government support will be necessary under present conditions if the town is not to be placed in a position inferior to that of the younger new towns. In particular the



company's special claim to relief from the development charges under the Town and Country Planning Act, 1947, will have to be met. What is to be looked for from the company is energetic enterprise based upon its past experience and full use of the knowledge it has gained.

In conclusion let us agree that the first town on the garden city plan could not realize all its possibilities. It may justly be said to be a wonderful testimony to the promoters of the first garden city that they succeeded in sustaining their scheme intact. Was there ever a first attempt that was so successful? How many models of a great invention have to be made and scrapped before a satisfactory result is reached? In town-building such prodigality cannot be practised; but it would not have been strange, or contrary to human experience, if a number of attempts at building garden cities had to be made before anything worth having was reached. Yet Letchworth, this first attempt at a decently planned modern town on a new site, is, with all its faults, a credit to those who have built it. And although the new garden cities that arise may attain a higher standard, nevertheless Letchworth will always rank as an outstanding achievement, and ought to come to occupy a more and more conspicuous place in our national life.

PART III

WELWYN GARDEN CITY,  
THE FIRST SATELLITE TOWN





## CHAPTER I

### ITS ESTABLISHMENT AND GROWTH

While the housing of the working classes has always been a question of the greatest social importance, never has it been so important as now. H.M. KING GEORGE V (11th April 1919)

#### § 1

AFTER the first war, when there was much talk of necessary reconstruction, and visions of a better world were in many minds, the housing question was one of the first to be dealt with. There was a great, even overwhelming, shortage of houses throughout the land, and at the same time a strong desire to improve the conditions in which a great mass of the people were living. The pressure upon the Government and the municipalities became intense, and the Housing Act passed in 1919 was the outcome of an intention to do something big at almost any sacrifice. The country was ready for any scheme that would enable the problem to be tackled in a large, generous, and thorough manner. A sign of the times was the action of the Prime Minister (David Lloyd George) in sending a small private deputation to Belgium and Germany to report to him upon the garden cities reputed to have been established there, with a view to schemes being carried out on similar lines by the Government in this country. Unfortunately, the deputation returned to report that there were no garden cities in Belgium or Germany to be imitated.

Although the Housing Act of 1919 was popularly supposed to be a great garden city measure, it produced no garden cities, and was indeed almost the worst legislation that could have been devised from a garden city point of view. The great desire of those responsible for it was to get the largest number of houses built in the shortest possible time in places where the demand was most pressing. Every other consideration, with one exception, was subordinated to that. The exception was that the houses were to be well planned, and the sites well laid out. But, as we now know, through the over-organization of demand without sufficient provision for means of supply, the 1919 Act broke down completely, and, though many houses were built, not even the beginnings of a national housing scheme or policy resulted from the efforts that were made. It does not come within the scope of this book to deal at any length with the housing problem as such; but we are keeping to our subject when we say that the outstanding fault of the Coalition Government's housing policy in 1919 was that no attempt was made to establish a system of distribution of houses. The country was divided into regions with a local commissioner in charge of each, but no use was made of this regional organization for the purpose of associating the building of houses with industrial development or to deal with any other considerations but to get the largest possible number of small houses

built quickly. At first, emphasis was placed upon numbers without regard for costs; but when the Minister of Health was dismissed as a 'squander-maniac' for carrying out his orders, emphasis was more and more placed upon cutting down costs to the bone. Houses were built where the immediate demand was most insistent, and no considerations of town-planning or town-economy were allowed at any time or under any minister to interfere. Although the housing schemes were often proudly and falsely described as 'garden cities,' the lessons of Letchworth were ignored, except so far as house-planning and site-planning were concerned; and the achievements of the garden city in bringing town and country together, and in providing by a comprehensive development scheme an economic basis in improved land values for housing, were treated as though they were unknown.

## § 2

The significance of garden city principles in relation to a national housing policy was pointed out in various publications, the first of which was *The Garden City after the War*, written and published by the present writer in 1917, in which a housing policy based on the garden city was proposed:

Think what it would mean to England if, instead of haphazard building and the increase of great towns, the new building were made the occasion of establishing fifty or more towns of 50,000 people, centres of civic consciousness and pride, reconstructing local life and custom, and contributing to the richness and variety of our national life.

The proposal was that associations should be formed on the model of the first garden city either by the Government or by the county councils and financed by the Government.

The proposal to build garden cities can stand its ground on the question of finance; for the new houses and factories must be built, and it will be no more expensive to build them on the garden city plan than to undertake them on no plan at all. It is true that in the rapid creation of new towns the State could not in the first instance expect the same degree of security for its advances that it generally obtained under the old Housing Acts; but reasonable security could be obtained by intelligent selection of sites, by the use of the experience of Letchworth in the details of development, and by the nomination of a proportion of the directorate. Money so expended would be an investment of lasting value, not devoted merely to tiding over an evil time, or even to meeting the bare needs of social hygiene, but a definite addition to the national wealth and well-being. Of its ultimate security in the strictest sense there can be no question, for what better security for capital can there be than that of the increased population and productivity of the land? It is obvious that what has been done for the first time with straitened means by a group of individuals can be done with far greater prospect of success with wider experience, larger resources, and an idea no longer merely experimental.

Following upon the issue of this pamphlet, Ebenezer Howard initiated a propaganda effort on his own account for the building of fifty garden cities, and when the present writer was free to do so a committee was formed under the name of the National Garden Cities Committee with Howard as its first chairman. Further publications were issued by this committee entitled *New Towns after the War* (1918), for which F. J. Osborn, W. G. Taylor, and the present writer were jointly responsible, and *A National Housing Policy* (1919), and active efforts were made to bring the idea before the public, the

Government, and the local authorities. The committee was soon invited by the Garden Cities and Town Planning Association to join forces with it, and the joint body in February 1919 presented the following memorandum to Dr. Addison, the President of the Local Government Board (as it then was):

We desire to represent to the President of the Local Government Board that the dimensions of the present housing problem provide an opportunity for the adoption of the garden city principle as a national policy. That principle has been maintained by the Garden Cities and Town Planning Association for a period of twenty years, and has been put into practice at the town of Letchworth, with results that, we believe, indicate very clearly its social and economic value. The significance of the present situation is that it arises when the increasingly definite demands of the working classes for improved conditions of life are accompanied by a powerful movement on the part of industry for better manufacturing facilities, and by a pressing need for agricultural reconstruction. It is because the garden city principle is believed to be a means by which the whole range of these demands may be approached with some hope of meeting them, that we wish seriously to urge its recognition upon the Government.

The fact that the provision of workmen's houses has now definitely been accepted as a national responsibility, brings within reach the formation of a settled housing policy for the country as a whole. That policy cannot, however, be formed so long as housing is upon a purely emergency basis; it requires to be considered in relation to the problems of town-planning, transit, and the location of industry, with which housing is inseparably connected. We believe that in view of the nature of the problem, it is of the first importance that no time be lost in preparing the foundations of a sound policy for the future.

We venture specially to suggest that as the financial conditions under which building will be conducted remove the provision of houses from the influence of the law of supply and demand, the adoption of a principle of distribution that will be consonant with the national interest is a matter of extreme urgency. To leave the building of houses to the demands of local authorities or employers of labour, without control based upon national policy, will be to plunge into economic and social confusion, from which escape may be difficult. For example, the effect of the Government subsidy will be to relieve the great towns of certain economic checks to expansion, with the result that their traffic, health, and municipal difficulties may be intensified. In the absence of a survey of the country as a whole, in which account is taken of the possibilities of scientific planning, it is impossible to deal effectively with this question. But it must surely be clear that it must be faced, otherwise houses may be built in uneconomic situations and become an increasing burden upon the community.

The provision at great expense of tramway and other travelling facilities in the great towns is no solution of their housing problems. The expenditure of time, energy, and money upon travelling, as well as the discomfort that is endured, are factors that are becoming appreciated, and the objection to them on the part of labour is likely to increase. Already the demand has been made that journey-time shall be paid for, and it is obvious that any standard working day may need to be preserved. The cost of travelling in the great towns may thus be thrust upon industry with results that do not need to be commented upon.

Further, by building in and around the great towns, land of a high price has to be used, with the result that the value of development is lost to the community. Sound housing finance requires that the increased land value produced by development should be enjoyed by the State jointly with the local authority; the increased land value would then be a set-off against the loss incurred in building. This advantage can only be secured by building on land of agricultural value; and that, we suggest, can only be done by a combination of housing and industrial development organized on a large scale.

We venture, therefore, to ask the President to consider the following proposals:

That in conjunction with the Minister of Reconstruction a committee be appointed to report upon the possibility of the development of new industrial centres on the garden city principle.

That in connection with the proposed new Housing and Town Planning Bills, provision be made to establish a National Town Planning Commission for the country as a whole, with



powers to initiate schemes and to act through Regional Commissioners in co-operation with local authorities in setting the provisions of the Acts in motion. The Commission to be composed of experts appointed by the Government, representatives of local authorities, and representatives of employers and trade unions.

The reply made by Dr. Addison to this memorandum was that there was no time to attend to such matters until the housing problem had been dealt with. *The Times* (24th February 1919), commenting upon the memorandum, said in the course of a leading article:

One can understand why Dr. Addison wants to get on with the building and resists all projects which he thinks will delay the putting of the work in hand. And yet the work should be done well. . . . If . . . control . . . were made to extend over the situation and the placing of the new houses as well as over other matters, some of the advantages for which last week's deputation pleaded might be secured. One feels that what we really ought to have is compulsory co-operation of various local bodies within a great district for carrying out schemes of this kind.

When the Housing Bill was introduced into Parliament, efforts were made to insert clauses that would enable garden city development to take place; but the Minister was not sympathetic with anything that might tend to delay the one matter of getting as many houses built as quickly as possible, which was the object to which he had committed himself.

### § 3

Ebenezer Howard was convinced that an attempt should be made to start a second garden city without waiting for official support, and discovering that an area of land in Hertfordshire, which had already been considered a good site for a new scheme, was to be put up for auction in the early summer of 1919, he determined that the opportunity should not be lost. He therefore raised sufficient money from various friends to enable him to instruct agents to attend the sale and bid for the property. This was done, and 1,458 acres were bought at the price of £51,000, and the deposit paid. But the area was insufficient for a garden city, and other land had to be obtained. Therefore the purchase of a further 230 acres (Sherrards Wood) was contracted for with Lord Desborough, and a company called Second Garden City Limited was incorporated on 15th October 1919, with a view to securing a still further area, which belonged to the Marquis of Salisbury, forming part of the Hatfield estate. After some not very easy negotiations this company entered into a contract with Lord Salisbury for the purchase of 689 acres at a price of £40,000. The story of the purchase of the land that made up the Welwyn Garden City estate is a romance that must one day be told. This much at least of the story can be told here, though the story itself, as well as many of the events that led up to the establishment of the town, belongs to personal history. When Howard was informed of the initial property sale, he went at once, without consulting his friends, to Sir John Oakley, head of the firm of Daniel Smith, Oakley & Garrard, who were Lord Desborough's auctioneers, to say that he intended to bid for the land for a garden city. Oakley took no advantage of this information but advised Howard to consult Norman Savill of



Based upon the Ordnance Survey Map, with the sanction of the Controller of H.M. Stationery Office.

# THE LAND ACQUIRED FOR WELWYN GARDEN CITY IN ITS ORIGINAL CONDITION IN 1919

Edwin Savill & Sons, another eminent firm of surveyors, which Howard did with happy results. For Savill became interested in Howard and his scheme, gave him good advice, and acted for him at the sale, actually putting up out of his own pocket a substantial amount to complete the deposit money when the sum provided by Howard proved insufficient.

Howard got to join him in this scheme J. R. Farquharson, an industrialist, who had been interested in cottage building at Letchworth, Lieutenant-Colonel F. E. Fremantle, M.P., who had been county medical officer of health for Hertfordshire, Walter T. Layton, C.H., who was at that time director of the National Federation of Iron and Steel Manufacturers, R. L. Reiss, Bolton Smart, who was then a director of First Garden City Ltd., Samuel Smethurst, a well-known builder, and the present writer. The intentions of those concerned was set out in a 'Preliminary Announcement of a garden city in Hertfordshire for London industries,' issued in September 1919, before the company was formed. This announcement well described the scheme at its inception and the ideas that animated those who were responsible for it, and the following extracts are worth recording:

#### A SATELLITE TOWN FOR LONDON

The object of the company will be to build an entirely new and self-dependent industrial town, on a site twenty-one miles from London, as an illustration of the right way to provide for the expansion of the industries and population of a great city. Though not the first enterprise of the kind (the main idea having already been exemplified at Letchworth), the present project strikes a new note by addressing itself to the problems of a particular city. To this end the site has been carefully chosen so as to minimize the obstacles in the way of giving a new turn to the development of Greater London.

The time is peculiarly opportune. On the one hand, the great demand for housing and factory accommodation is likely to lead to the rapid development of the company's estate. On the other hand, it is urgently necessary that a convincing demonstration of the garden city principle of town development shall be given in time to influence the national housing programme, which is in danger of settling definitely into the wrong lines. Unless something is done to popularize a more scientific method of handling the question, a very large proportion of the houses to be built under the national scheme will be added to the big towns—whose growth is already acknowledged to be excessive.

Garden suburbs are no solution. They are better than tenements, but in the case of London, they have to be so far from the centre that the daily journeys are a grievous burden on the workers. Thousands of people have flocked back to the riverside districts in order to be within walking distance of their work. Again, suburban development is costly. Land bought for housing in the London suburbs has cost £700 to £2,000 per acre. The necessary new lines of communication will cost millions. And this method of expansion ignores the needs of industry. Manufacturers carried on, as they are increasingly carried on, in makeshift premises in central London, cannot hope to be efficient or to meet either the legitimate demands of labour or the renewal of international competition.

The company's scheme, therefore, will pay equal attention to housing and to the provision of manufacturing facilities. Healthy and well-equipped factories and workshops will be grouped in scientific relation to transport facilities, and will be easily accessible from the new houses of the workers.

The town will be laid out on garden city principles, the town area being defined, and the rest of the estate permanently reserved as an agricultural and rural belt. Particular care will be taken, in the arrangement of the town, to reduce internal transport and transit, whether of factory



and office workers, or of goods, to the practicable minimum. A population of 40,000 to 50,000 will be provided for, efforts being made to anticipate all its social, recreative, and civic needs. The aim is to create a self-contained town, with a vigorous life of its own independent of London.

In accordance with those principles, the freehold of the estate will be retained in the ownership of the company (except in so far as parts thereof may be required for public purposes) in trust for the future community. The preservation of the beauty of the district and the securing of architectural harmony in the new buildings, will be among the first considerations of the company. The maximum building density will be twelve houses to the acre.

Factory sites, with good roads and sidings, will be provided at moderate ground-rents. No difficulty is anticipated in letting such sites, for which there is a steady demand in the London district.

Progressive firms show a growing desire to get away from the congested central districts of London and other towns; and the advantages offered by the new town will be vastly superior to any alternatives open to manufacturers.

The greater part of the estate is now farmed, arable crops predominating. The coming of a new large population will create a big demand for produce and much increase the value of the farms and the number of workers on the agricultural belt. Small holdings will be provided for ex-service men, groups of co-operators, and others. It is believed that the situation will be favourable for fruit farming and certain classes of market gardening. Allotments will also be available for those who want more land in addition to their gardens.

The company will make special arrangements to secure an adequate and pure milk supply for the town.

From the national standpoint an important feature of the whole scheme is its influence upon the agricultural community. Not only does it provide openings for many additional workers on the land, but (unlike other methods of rural reform) it brings the advantages of a vigorous urban social life within the reach of the agricultural population.

The promoters desire to emphasize the public character of the enterprise. The constitution of the company fixes a limit of 7 per cent to the dividend, and provides for the representation of the local authority on the board of directors. All profits above the maximum dividend will be applied for the benefit of the town. And it is intended that in due time the whole estate shall be taken over by the representatives of the new community, subject to a fair provision for the rights of those who have subscribed capital to the company.

#### § 4

A survey of the property was put in hand even before the purchases were completed, and by the following spring the promoters were in a position to bring the scheme before the public. The board of directors had already been strengthened by the addition of Sir Theodore G. Chambers as its chairman, the Earl of Lytton, and Sir John Mann, the well-known accountant. On 29th April 1920 Welwyn Garden City Ltd. was formed with a capital of £250,000. The prospectus issued on 4th May 1920 explained the objects of the company as follows:

The town has been planned as a garden city with a permanent agricultural and rural belt, and with provisions for the needs of a population of 40,000 to 50,000. It will thus be seen that the scheme is entirely distinct from a garden suburb, which by providing for the housing of the people working in an adjoining district does nothing to relieve congestion and transport difficulties.

The maximum density of houses is planned for twelve to the acre, and the average not more than five to the acre. The method of planning proposed to be adopted by the company will not only tend to reduce the cost of development, but will also preserve the amenities and health of the town.

In order to encourage the demand for sites and to stimulate the rapid development of the

town, the company is organized on the basis of the original shareholders receiving dividends of no more than 7 per cent per annum (cumulative). All further profits of the company (subject to the payment of dividends on shares forming part of any increase of capital) are to be expended for the benefit of the town or its inhabitants. This expenditure will improve its amenities and tend to lower rates and thus, it is believed, attract both residents and business firms; and the better conditions so brought about, under which a large working population will be living, cannot fail to promote their contentment and happiness.

The revenue of the company will fall under the following heads:

1. Profits on the disposal of lands and the creation of ground-rents.
2. Profits from the company's participation in concessions, such as the development of the resources of building materials on the property, and joint interests in building undertakings and other enterprises carried on within the town, such as stores, cinemas, hotels, restaurants, nursery gardens, etc.
3. Rents and profits from sports grounds, recreation or assembly rooms, clubs, swimming baths, motor services, or other businesses in which the company may own an interest.
4. Rates chargeable on the property for public services rendered by the company.
5. Rents and profits from the company's agricultural estate.

It is estimated that the revenues of the company will, at an early date, suffice to pay the dividend on the original capital, and leave a balance of revenue that will materially assist in the development of the amenities of the town, thus tending to create higher land values and to secure still further the shareholders' interests. . . .

The essence of the company's undertaking is the conversion of agricultural land having a comparatively small value into urban land ripe for building, and capable of producing good ground-rents. Land in the immediate vicinity of a station twenty-one miles from London will often realize from £500 to £1,000 an acre, even without such amenities as exist at Welwyn. The company's estate provides ideal residential sites, and is also admirably situated for manufacturing purposes. Having regard to the heavy present demand for building sites, there should be no difficulty in securing the rapid development of 600 or 700 acres in the neighbourhood of the station. The development of this area alone should produce a revenue of at least £35,000 per annum.

The capital value of the land will increase *pari passu* with development. The combination of the estates which have been purchased from Lord Desborough and the Marquis of Salisbury has considerably enhanced the value of the whole. It is estimated that with the development of 600 or 700 acres, the estate will be worth at least £500,000, apart from the value of the buildings and public services owned or partly owned by the company.

The revenue-producing capacity of the company's undertaking may be gauged from the fact that the area of the proposed town and the population to be provided for will approximate to those of Cheltenham, Colchester, Eastbourne, Southport, Carlisle, Luton, or Dewsbury, according to the census of 1911. Within this area the company will command, in addition to its ownership of the fee-simple of the land, a virtual monopoly in respect of a large number of enterprises of a profitable nature. The revenue consequent upon this monopoly will be employed by the company, after due provision for the shareholders' interests, in behalf of the public purposes of the new town.

## § 5

The property consisted of 2,378 acres, costing with timber and after payment of legal expenses (but excluding other expenditure) the sum of £105,804, an average of £44 10s. per acre. The estate was twenty miles from London on the Great Northern Railway main line, which ran through the middle of the estate from north to south; at the centre of the estate there were branch lines to Hertford on the east and to Dunstable on the west. The town of Welwyn was two miles to the north-west, Hatfield three miles to the

south. The estate was on high land, the greater part sloping to the valley of the Lee on the south-west and south-east, and a smaller part sloping to the Mimram (or Maran, a tributary of the Lee) on the north. It was well wooded, and included the hamlet of



WELWYN GARDEN CITY AND THE SURROUNDING TOWNS WITHIN A TWELVE-MILE RADIUS

Handside, the greater part of the village of Hatfield Hyde, and part of Digswell Water. There were comparatively few buildings on the property. Since the original prospectus, further land has been acquired, and the total area of the company's estate, after deducting what has been disposed of to the railway company, etc., is now (1949) 4,536 acres.

The surveys for the water and drainage schemes proceeded, and a temporary water supply was provided by deepening an existing well at Handside, almost in the centre of the estate, installing a pump, and building a temporary reservoir. This enabled



development to be started. Among the unexpected obstacles with which the company had to contend at the outset was the existence of sporting rights held on long lease over a large part of the estate. To what extent these sporting rights could have held up development on the area covered by them is a difficult legal question, which the company was fortunately not called upon to investigate, owing to the reasonable attitude taken up by the lessee.

Arrangements had already been made with the railway company for a temporary station, which in view of what the railway company regarded as the impossibility of placing it upon the main line was erected (at small cost) on the Dunstable branch line. A service of trains was given and the station opened for public use in 1920. Until then, Hatfield or Welwyn station had to be used. The main line station was started in 1925 and opened in October 1926. The slowness of the railway company in carrying out this work was a continuous handicap upon the growth of the town, because passengers on main line trains had to change at Hatfield for the branch line. It was only when the railway company was shown that it was losing heavily on the operation of existing traffic by the use of the branch line station that it was induced to build the permanent station. The station building, however, placed at the end of the fine avenue laid out by the company, was an inadequate building for its site, though no doubt sufficient for the business done at the time; though it has been extended, it does small credit to the company and provides poor accommodation for the public.

The development of the estate started with the erection of large notice boards on each side of the railway announcing 'London's First Satellite Town,' and by putting in hand a scheme for the building of fifty houses by a public utility society formed by the company, under the Housing Act, 1919, called Handside Houses Ltd. These houses were intended for the company's workmen and staff. They were built under a prime-cost contract by Trollope & Colls Ltd., and the first house was occupied just before Christmas in 1920. To provide accommodation for the building operatives and the men engaged on other constructional work, the contractors built a camp consisting of sleeping quarters, canteen, and club rooms, which the garden city company continued to manage for a number of years. The co-operation of the contractors with their large resources was of immense advantage to the company in the early stages of the town's development. In fact, the company was dependent upon them.

## § 6

The position of Welwyn Garden City in relation to London, its pleasing natural features, and the demand for houses in the metropolitan area at once attracted to it numbers of people who wanted somewhere to live whence they could get to their work in London. It was not the object of the company to build anything in the nature of a suburb, or a mere dormitory town; at the same time, it was desired that the town should not be confined to any one class of the community, and the provision of sites for houses

for people whose business was not actually in the town itself was accepted as being within the scope of the enterprise. As a matter of fact, to build houses for residential purposes was the only practicable way to start the town. To wait for manufacturers to build factories on an empty site, and then to erect cottages and houses for the employees of the factories, would have meant waiting in vain. The town had to be begun, it had to show signs of life and stability before it could attract manufacturers and become the factor in industrial decentralization that its promoters desired it to be. Further, by meeting the demand for such houses, the public services could be more quickly placed on a remunerative basis.

The company considered the question of starting development on that part of the estate near the old Welwyn station, which adjoins the estate on the north. Numerous applications for sites were received from people who wished to be near that station, with its established service of trains, and, water being available, building could have been begun without delay. But it seemed inadvisable to allow development to take place so far from the spot which the company desired to make the centre of its operations; it was also strongly desired to preserve the beautiful valley of the Mimram and the village of Digswell Water, familiar to all travellers on the railway, and it was decided to permit no building there. Sites were therefore offered on the existing Handside Lane, and on two new roads, Brockswood Lane and High Oaks Road, on 999-year leases at fixed ground-rents, within walking distance of the new station. These sites were taken by public utility societies, by individuals for their own use, and by speculative builders. Labour-Saving Houses Ltd. and Welwyn Homes Ltd. were two societies formed to take advantage of the facilities offered by the Government under the Housing Acts of 1919 for the building of small middle-class houses. The societies, being among the first to build on the estate, had specially favourable terms offered to them. The first society started with a scheme of twelve houses, followed immediately by a further twenty-eight which were let to tenant investors. In spite of the high costs of building, this society, unlike most other public utility societies that built in 1920, reached a sound financial position, as the result of careful management, an enterprising policy of further building as prices fell, and success in getting further sites at comparatively low rents. Altogether the society built ninety houses; it was afterwards wound up, the houses being sold to the tenants. All these public utility society houses, being carried out as part of a consistent scheme, contributed considerably to the architectural harmony of the town.

Most of the early applicants for houses asked for plots ranging from a quarter of an acre to an acre each. Coming to a garden city, they had the idea that big gardens would be the rule. It was found that most of the applicants had very little idea of the amount of gardening labour involved in a plot of the size they desired. They did not realize that in practice very few people who are engaged in other business can look after a garden of a quarter of an acre, to say nothing of half an acre or more. In those days, with the cost of living much greater than it was before the first war, the expense of

keeping up a large garden was more than most people were able to bear, so that there was much to be said for a house with a garden of such a size that it could be maintained with a few hours' work a week. The company found, therefore, that when it came to the point, the number of people who really wanted a large garden was small, and the plots subsequently taken, with few exceptions, varied in size from an eighth up to a fifth of an acre.

## § 7

The high costs of building and engineering work in 1920 and the following years and the difficulty of raising money were considerations that led the company to formulate its development policy with great care. The early stages of development caused the directors many anxious hours, and forced them to shoulder considerable personal financial burdens. With a view to economy, the policy adopted was to carry out development in small well-defined sections, and to complete building on the roads as they were constructed. To carry this policy out consistently and to avoid holding vacant plots it was decided to form a subsidiary company to undertake the erection of houses. The difficulty of getting building labour and materials, owing to the scarcity of both, was another factor that induced the company to set up a building organization of its own, thus making the town independent of building firms with interests elsewhere, and making it possible to get together workmen and staff to specialize on the particular requirements of the town. The project of a continuous building programme for a period of twenty years or so was a further important consideration. This building company was formed, the finance being found by the company, and a joinery works erected: a description of the undertaking is given in the chapter devoted to industries. The first scheme of twenty-six houses, designed by the company's architect, proving satisfactory, the organization was enlarged and a definite building programme undertaken. The building organization rapidly became an important auxiliary to the company's scheme of development. Unmistakable advantages have thus been secured, the plots have been built upon as the roads have been constructed, resulting in the greatly improved appearance of the town, and the building operations have proved to be remunerative. The houses were designed by the architect in conjunction with the building company, and a variety of plans was evolved for houses costing from £500 to £3,000, suitable for almost every position and aspect. The architectural character of the town was largely being formed by this means, and there is little doubt that the system secured the full benefits of orderly town-planning, combined with sound architectural treatment of buildings of every description. Moreover, the experience that was being gained resulted in a steadily improved type of plan, both the architect and the builder enjoying the advantages of working together, which ensured a high standard of building and design, accompanied by economy in construction as well as greater efficiency in planning.



## § 8

A housing exhibition was one of the early events in the life of the new town, and, as was proved at an earlier date at Letchworth, was a mixed blessing. The proprietors of the *Daily Mail* newspaper had conceived the idea of building an ideal village as a step towards helping to solve the housing problem. Negotiations were entered into for a site at Welwyn Garden City, and an agreement was made with the garden city company for the leasing of an area of land. The 'village' was intended to consist of permanent houses of various designs and in various forms of construction, and to possess some architectural features and a character of its own. The scheme was an ambitious one; and though it was not completely carried out, forty-three houses were erected on 6·3 acres. The 'village' was only such in name, and though buildings of a character suitable for exhibition purposes are not usually such as should be allowed to exist permanently with other buildings, the architectural control that was exercised succeeded in bringing them into harmony with the rest of the town. The association of the newspaper with the estate caused many people to think that it had some interest in the garden city company's scheme; but it had none.

## § 9

Among the early domestic buildings of the town was Guessens Court, a group of forty flats erected by a body (now defunct) called the New Town Trust as a co-operative housekeeping scheme. It consists of a two-storeyed block forming three sides of a quadrangle, the fourth being partly occupied by the restaurant block. Each flat is self-contained, and has an entrance lobby, sitting-room, bathroom, and kitchenette, with one, two, or three bedrooms. The rent includes the use of the dining-room. Additional furnished bedrooms are also available where tenants can accommodate friends. The grounds include tennis-courts, and there is accommodation for bicycles and motor cars. Boot-cleaning, coal-carrying, and other facilities are provided. The single bedroom flats are for bachelor men and women; the larger flats offer accommodation for families, or friends living together, who desire to be relieved of the burdens of housekeeping.

## § 10

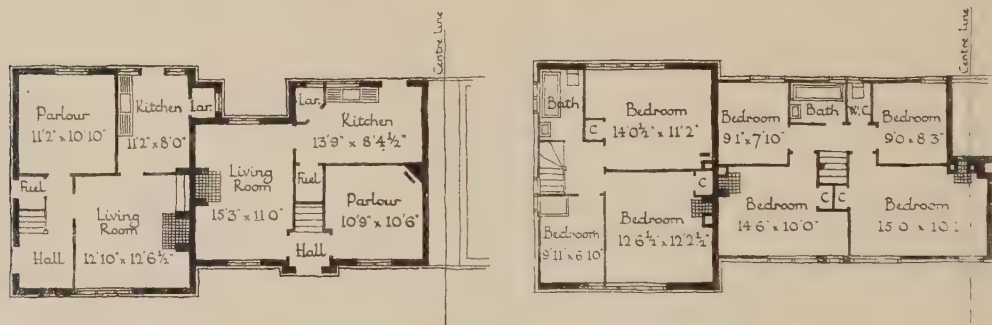
Among the architects who worked in the town during the first five years, in addition to Louis de Soissons, the company's architect, were C. M. Crickmer, Allen Foxley, C. M. Hennell & C. H. James, H. Clapham Lander, Barry Parker, W. A. Kenyon, Williams & Cox, Bennett & Bidwell, C. J. Kay, Berkeley Wills, J. C. Tickle, Mauger & Tanner, H. G. Cherry, and C. W. Fox, and to these names must now be added those of Leonard Martin, Spalding & Myers, Thompson & Fowler, T. W. Scott, Nicholas & Dixon Spain, H. C. Bankart, J. A. Crush, L. Angus, G. Barnsley, F. T. Winter, H. T. Barnard, T. Smith Shearer, Marshall Sisson, Wallis, Gilbert & Partners,

Prof. Salvisberg (Zürich), C. S. Brown, Frost, Chamberlain & Edwards, Christian Barman, A. J. May, R. J. Muir, John C. Soutar, C. H. Elson & H. Stone, J. W. Dudding, E. C. Kent, Louis Moore, Sir Charles Nicholson, Leslie K. Watson, G. A. Butlin, W. A. Eden, & F. W. Knight.



KITCHEN, LIVING-ROOM, PARLOUR, AND THREE BEDROOMS

LIVING-ROOM, PARLOUR, AND THREE BEDROOMS



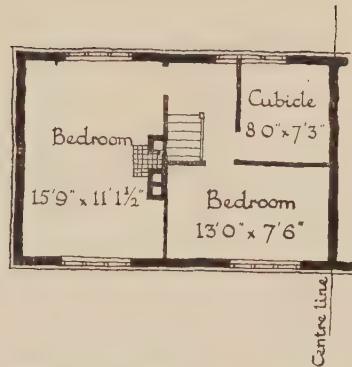
KITCHEN, LIVING-ROOM, PARLOUR, AND THREE OR FOUR BEDROOMS

The district council's first scheme of fifty houses (1921). (Housing Act, 1919.)

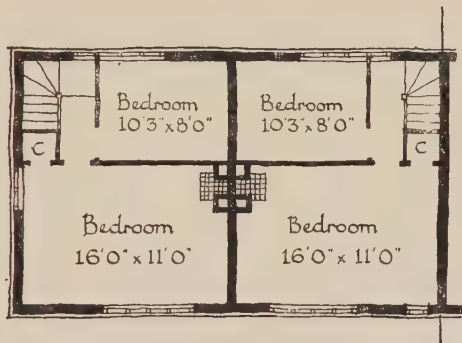
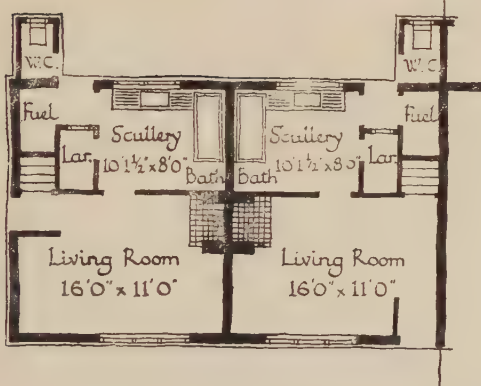
*Louis de Soissons, Architect*

## § 11

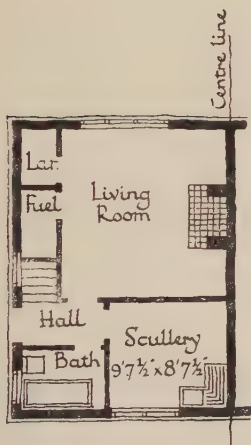
The first cottages built by Handside Houses Ltd., to which reference has already been made, were placed on both sides of an existing road and form a very pleasant group. The original intention in building them was to sell them, at cost, to the local authority as houses for the working classes under the special provisions of the Housing Act of 1919, but that course was not followed. As there was insufficient lodging accommodation in the district and the difficulty of getting skilled workmen in 1920 very great, the workmen's camp already referred to was erected, the expense being added to the cost of development, but it was considered to be inevitable, though the social as well as economic drawbacks to this kind of accommodation were considerable. Had it been possible to provide sufficient houses for the working population at the start, the building of the camp would have been avoided. But there was no one to do it: the rural council



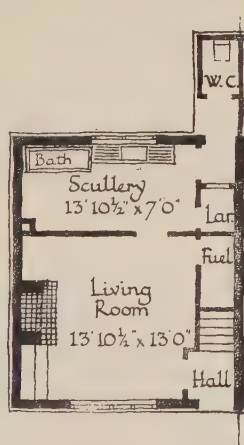
KITCHEN, LIVING-ROOM, PARLOUR, AND THREE BEDROOMS



SCULLERY, LIVING-ROOM, AND TWO BEDROOMS



SCULLERY, LIVING-ROOM, AND TWO BEDROOMS  
(END HOUSES)



SCULLERY, LIVING-ROOM, AND THREE BEDROOMS

The district council's second scheme of ninety-three houses (1923). These houses were planned in consultation with the workmen with a view to meeting their expressed demands and to reaching the lowest possible rents. The condition under which the scheme was prepared was that the houses were to be economically self-supporting, without subsidy from the State or the local authority, and that result (something of a *tour de force*, however) was attained. When the Housing Act, 1923, was passed, they were entitled, however, to the subsidy of £6 per annum for twenty years.

*Louis de Soissons, Architect*

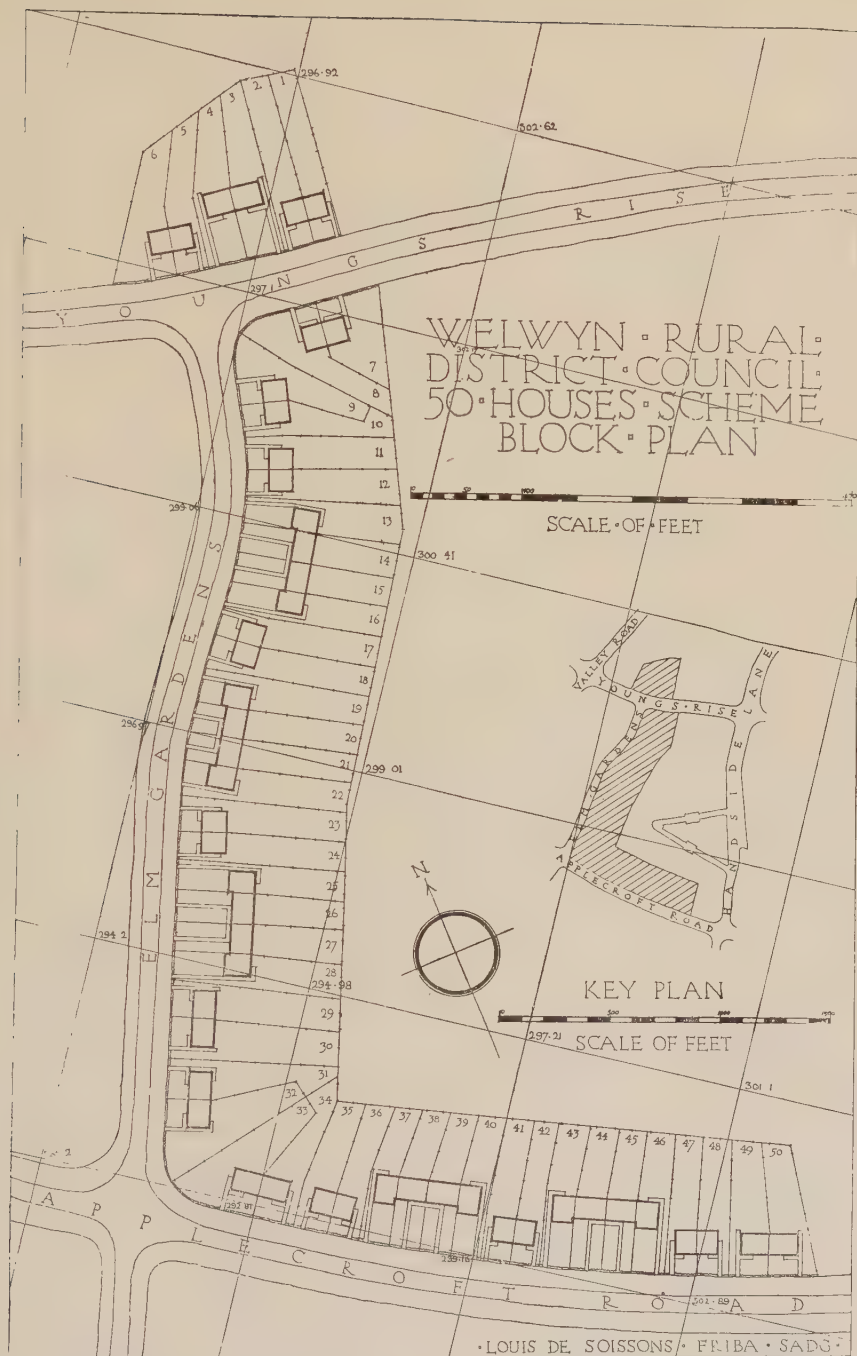


would not (it was not at that date sufficiently convinced of the permanence of the garden city, and in any event, from its own point of view, not in the least wanting the garden city, why should it?), the Ministry of Health would not (though it had the necessary powers, had the Government desired to support garden cities), and the garden city company was straining its resources to the utmost in building even fifty houses. It is clear, however, from the experience gained at Welwyn, that the provision of a large number of cottages for the working population engaged upon the building of a new town should be undertaken as the first work of development.

As the only practical means of getting houses built to let at weekly rents was through the local authority (the financial assistance offered to public utility societies being insufficient to enable them to build such houses), the rural council had to be convinced that it should build. The number of men working upon the estate was increasing and the demand was obviously great; but it was not certain to the local authority that the scheme would proceed, and it was only with great reluctance that it was induced to move. At last, in 1921, a start was made by the rural district council with 50 working-class houses, followed by a second scheme of 93 houses in 1923-4, a third scheme of 100 houses in 1924-5, and a fourth scheme of 200 houses in February 1925. The tremendous handicap placed upon the development of the scheme by the difficulty of getting workmen's houses is the most significant fact to be noted in connection with the establishment of Welwyn Garden City. Only by the most strenuous efforts were the rural council and the Ministry of Health persuaded to put building in hand. It took two years to get the first fifty houses and a further two years to get another ninety-three. It took far too long to get the houses, and there were never sufficient. The first fifty houses were built under the 'Addison' Act of 1919, the rents being fixed by the Ministry of Health, and the loss to the ratepayers being limited to the produce of a rate of a penny in the pound. All the other houses received the fixed Government subsidy under the Housing Acts of 1923 and 1924. Any deficits on the schemes were to fall on the Welwyn Garden City parish alone, the rest of the rural district being thus under no risk of a rate-burden by reason of the relatively large amount of housing in the new town. The housing schemes carried out under this arrangement were as follows:

<i>Date of Completion</i>	<i>Number of Houses</i>	<i>Average Cost including Land and Development</i>	<i>Architect</i>
Nov. 1922	50 (30 parlour, 20 non-parlour)	£546	H. G. Cherry
May 1924	93 (24 parlour, 69 non-parlour)	£329	L. de Soissons
Feb. 1925	100 (44 parlour, 56 non-parlour)	£450	L. de Soissons
March 1927	200 (126 parlour, 74 non-parlour)	£545	Hennell & James

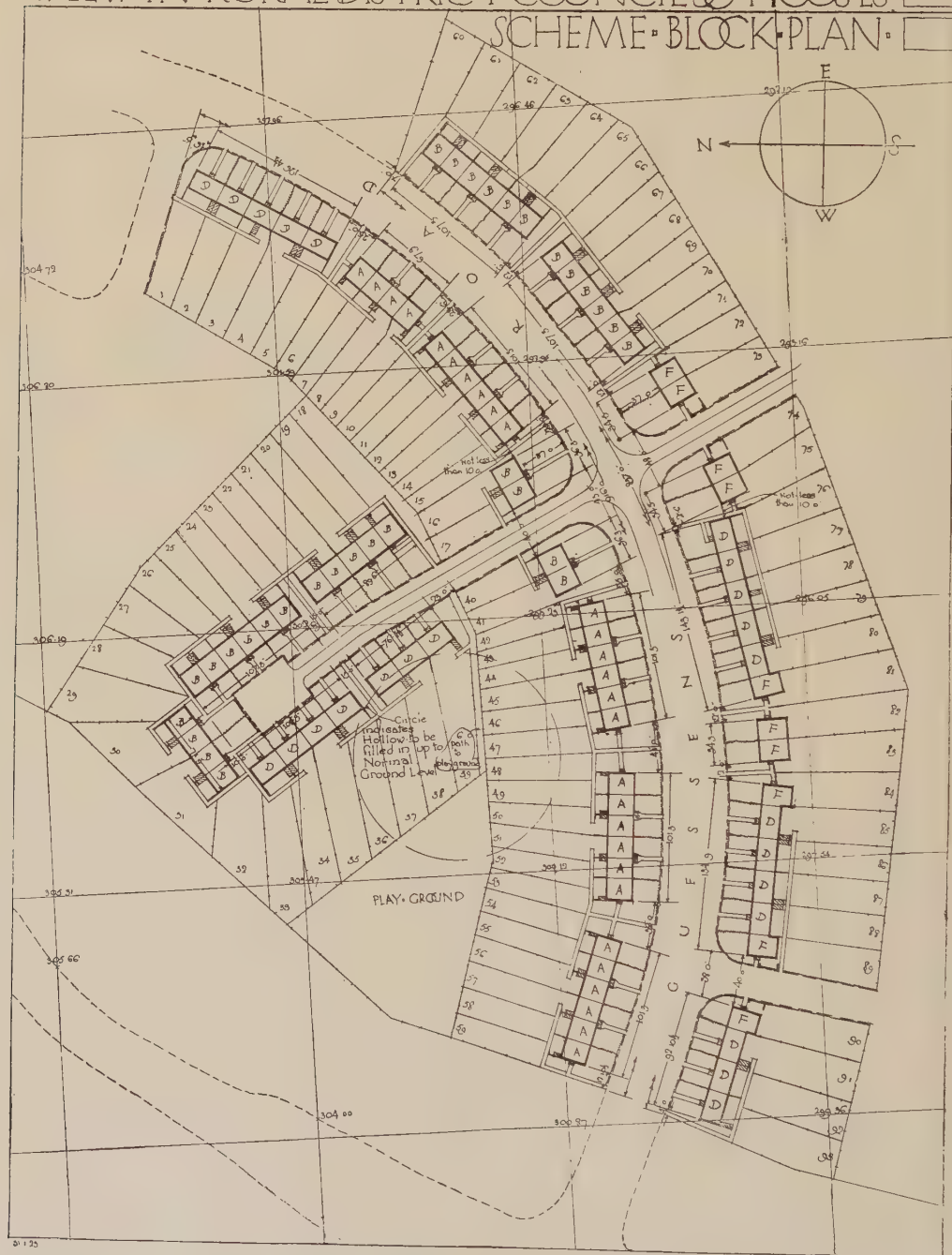
A differential rent scheme was first adopted in 1924. A basic rent was fixed for each house, according to its accommodation and relative value, and the rents charged to the tenants were adjusted by: (a) an addition to the rent for each lodger taken; (b) a deduction for each child of school age, or under sixteen years of age. The basic rent was fixed at 9d. per week above the amount necessary to provide for outgoings and reserves.



THE FEATURE OF THIS LAY-OUT IS THE SETTING BACK OF BLOCKS OF FOUR COTTAGES TO GIVE A SENSE OF SPACE AND INTERESTING GROUPING. FIRST HOUSING SCHEME (1921)

# WELWYN RURAL DISTRICT COUNCIL 93 HOUSES. ☐

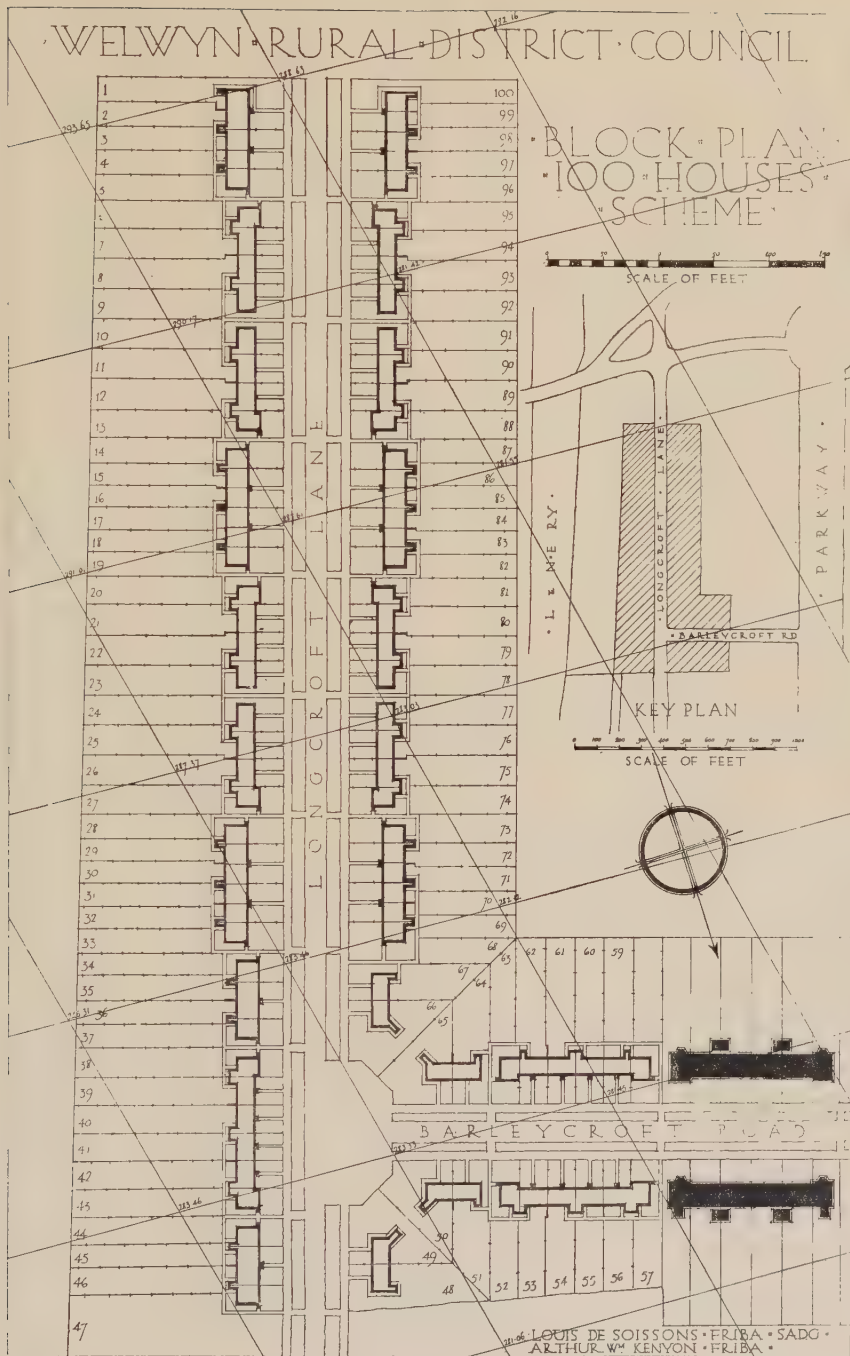
## SCHEME BLOCK PLAN. ☐



ECONOMY WAS A RULING FACTOR IN THIS SCHEME, AND ADVANTAGE WAS TAKEN OF THE CURVED ROAD TO GIVE VARIETY TO A SCHEME WHICH WOULD OTHERWISE HAVE BEEN MONOTONOUS. SECOND HOUSING SCHEME (1923)

*Louis de Soissons, Architect*





A LONG STRAIGHT ROAD IN WHICH INTEREST WAS ATTEMPTED BY AN OCCASIONAL BREAKING FORWARD OF THE BUILDING LINE AND GABLED ENDS, ACCOMPANIED BY A SLIGHT SET-BACK OF INTERMEDIATE BLOCKS  
THIRD HOUSING SCHEME (1924)

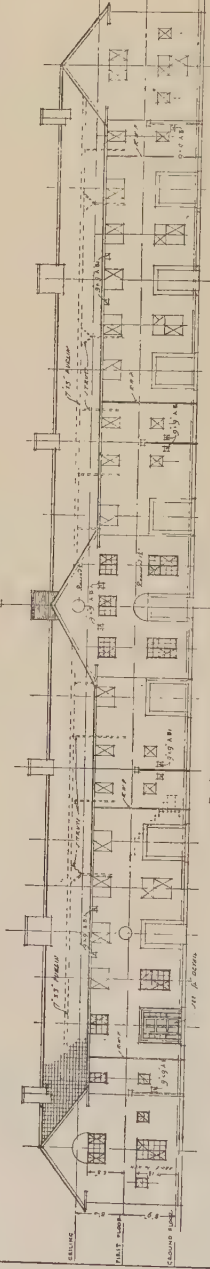
## WELWYN 'GARDEN CITY.

BACK ELEVATION

W·R:D·C HOUSING SCHEME No 4

SECTION A-A

END ELEVATION



# FRONT ELEVATION

GROUNDS

FLOOR PLAN

ROOF PLAN

## SECTION 68

### SHEDDING FLUES

DRAWN BY	NO.	A BLOCK OF 8 COTTAGES	
CHECKED BY	NO.	FIVE B3 AND THREE B4	
DATE	NO.	TYPE NO. W. 1.	
DRAWING NO.	SCALE	MENNELL & JAMES ARCHITECTS	
66 / 1	7 1/2" = 1 FOOT	19 RUSSELL SQUARE W. 1	

A tenant without children paid the basic rent. There was a deduction of 6*d.* per week for *each* child living in the house; and an addition of 1*s.* per week for every lodger in the house. A tenant with five children would thus pay 2*s.* 6*d.* per week less than a tenant in a similar house without children. For the purpose of the child allowance, only children under sixteen for whose maintenance the tenant was responsible counted, including children by a former marriage of either parent and adopted children. Any person living in the house except the tenant, his wife, their children, and the parents of either of them, counted as a lodger. The scheme was afterwards amended and converted into an allowance of 6*d.* per week in respect of children of school age, and an addition of 1*s.* a week for each lodger. The scheme, however, came to an end during the second war, the lodger's charge being discontinued in 1944 (because people were being compelled to take lodgers), and the child allowance in 1947, after the national scheme of children's allowances had come into force.

In 1924 the rural district council formed a parochial committee to relieve itself of the detailed consideration of housing matters for the town, reserving to itself the final decisions. When in 1927 urban district powers were secured the urban district council became responsible, and the rural district council was no more concerned. Not, however, for three years was the new council able to complete its first housing scheme for so few as 100 houses, which indicates what opposition had to be overcome to the town's development, for the delay and the small number of houses were not caused by absence of labour or materials, or the lack of demand. The council has carried out the following schemes:

<i>Date of Completion</i>	<i>Number of Houses</i>	<i>Average Cost including Land and Development</i>	<i>Architect</i>
Feb. 1930	100 (24 parlour, 76 non-parlour)	£466	H. C. Lander
Feb. 1931	200 (46 parlour, 154 non-parlour)	£416	{ L. de Soissons, A. W. Kenyon, and C. H. James
May 1933	65 (57 non-parlour, 8 flats)	£385	G. R. Barnsley
April 1936	84 (non-parlour)	£386	G. R. Barnsley
Nov. 1937	118 (91 parlour, 19 non-parlour, 8 flats, 6 garages)	£445	C. W. Fox
March 1939	132 (124 houses, 8 flats, 6 garages)		C. W. Fox
Aug. 1940	274 { (130 houses, 20 flats, 13 garages) (54 houses) (70 houses)		C. W. Fox
July 1943			
July 1947			
Jan. 1946	50 (prefabricated bungalows)		—
Jan. 1948	53 (37 houses, 16 flats)		C. W. Fox

The smallness of these schemes was not a defect, for small units give opportunity for variety of treatment; but the small number of schemes and the intervals of time between them are indicative of the handicap upon the growth of the town. That no more than 243 houses should have been built in the first five years under the Housing Acts is a commentary upon the attitude adopted to the garden city, and that it should have taken



twenty years to build less than 1,200 shows the absence of effective support. These facts are reinforced by the subsidies given or not given to the houses that were built. The first scheme under the Addison Act made the council liable for a penny rate, any difference being made up by the ministry; the second, third, and fourth schemes under the Housing Act, 1923, had a £6 subsidy per house for twenty years; the fifth, sixth, and seventh schemes under the Housing Act, 1924, had a subsidy of £7 10s. per house for forty years; the eighth and subsequent schemes from 1936 onwards were not subsidized at all. Thus the new town was forced to stand upon its own feet, and the benefits of Government assistance extended to the great cities and other towns were not made available.

Though it would be too much to say on the above and other grounds that the Ministry of Health put every obstacle in the way of the development of the town, it would not be too much to say that it did little to further its development. The ministry was occupied with controversies elsewhere with the large local authorities over subsidies and housing standards, and it was under pressure from the Treasury to reduce expenditure, so that its policy was to authorize building only where directly needed for slum clearance or the relief of overcrowding. The Government's policy was, in fact, to reduce building as much as it dared. Welwyn Garden City, therefore, having no slums to clear and no overcrowding to remedy, and lacking strong political backing, was making demands to which the department did not need to listen. Even though the district council was building without subsidy, and with no burden on the rates, and was asking only for loans at the current rate of interest, response from the ministry was lacking. It was only by the most persistent efforts that any building under the Housing Acts was permitted to be done at all. The town relied upon the terms of the Act to be able to let its houses at reasonable rents, for buildings with private capital would have raised the rents out of all comparison with rents charged elsewhere; but the loans to the local authority were granted so grudgingly that while the big municipalities were spending millions on their heavily subsidized and devastating housing estates, the new town got next to nothing.

There were the technical means to build at Welwyn Garden City and the desire to build, and the town was (so everybody said) making a contribution to the national well-being of the greatest value, but effective support from the department that existed to further the better housing of the people was not forthcoming. Had it not been for the garden city company's own efforts to build through housing associations, the town would hardly have grown except as a building estate for residential purposes. Then, in 1937, there seemed to be a disposition to take a more constructive attitude to the town and the ministry actually approved 'in principle' the erection of a thousand dwellings. This encouraged the district council; but the war brought building to an end, and although Welwyn Garden City was made a reception area, houses in course of erection were stopped unfinished, and were allowed to remain unfinished, except for a few houses near completion, which the council persuaded the ministry after three years' efforts to let them finish, substituting flat roofs; not until 1947 was building allowed to be resumed,

except for fifty prefabricated bungalows the year before. It is not a story that redounds to the credit of the central authority. Although the decentralization of London became national policy in 1946, and there were the organization, the sites, and the building labour to put in hand a large housing programme, the opportunity provided at Welwyn Garden City was neglected; instead the town was treated with indifference.

The object of all the cottage building was from the start to meet the needs of the workers at a rent which the average family could afford to pay. Ideals of good planning and building were upheld, but they were subject to constant whittling away, until, indeed, they wellnigh disappeared. The first scheme comprised houses with scullery and one or two living-rooms and three or four bedrooms. Small cottages with two bedrooms were built in the later schemes in response to the demand by people without children or with one child only, who could only afford a small rent and did not desire to take in lodgers. The cottage plans were discussed with representatives of the working people; the second scheme was worked out by a committee appointed by the workmen with a view to building the kind of cottage that was required. Great attention had to be paid not merely to the planning of the houses, but to their construction, to get buildings at the lowest possible cost, having regard, however, to future maintenance expenses. The lay-out of the schemes was also studied to get a good architectural effect within the limits of the severest economy.

Sites for the housing schemes were offered by the company in accordance with its plan. They varied in attractiveness, and some, it must be admitted, were awkward in shape and difficult to plan. It cannot be said, therefore, that housing sites were always ideal, and in the early years choice was restricted by economic necessity; but on the whole the sites are in their general features at least as good as are to be found anywhere. An important feature is that they are all within walking distance of the industrial area of the town.

## § 12

The district council at first appointed an architect in private practice to design and supervise each scheme, the selection being limited to architects living in the district. This practice, though preferable to that of councils dependent upon architectural assistants in their surveyors' offices or upon the employment of outside architects who have relied upon the Ministry of Health's published plans as the basis of their work, was not altogether satisfactory as it did not make possible the systematic study of the needs of the town, nor did it enable the fruits of past experience to be enjoyed. Since 1936, however, the council has put its schemes in the hands of one architect, partly as the result of the outstanding success of his first scheme and partly because of the desire that a thorough study of a continuous programme should be made and efficiency in planning and construction attained. This undoubtedly made possible the initiation of definite improvements in plans and specifications as well as in the equipment of the dwellings, the results of which are to be recognized.

In Welwyn Garden City, as elsewhere, site planning is closely bound up with numerous considerations: property values in relation to density, the contours, the disposition of streets and their usage, the preservation and utilization of natural features, the amount of land to be used for grouped gardens, culs-de-sac, children's playgrounds, etc., the means of screening back gardens, the arrangements of houses in blocks to give interesting and pleasing groups in elevation, the general roof line, outbuildings, the provision of public services, and, finally, the economic basis of the scheme in relation to the town as a whole. The study of the process of the everyday life of the community to provide for the full use and functioning of the houses to be built shows how vital the subject is.

Density of building is of importance, for low density and skilful grouping are factors in the maintenance of amenities and the popularity of the houses as well as of public health. This is a matter to which local authorities usually give insufficient attention, for which there is no real excuse, as the site cost plays a small relative part in the total cost of each dwelling. The contour of the site dictates the lay-out to a great extent, having regard to building and service costs, but it has been found that often very pleasing results can be secured in maintaining open and distant vistas. Aspect is of serious importance and by careful road planning dull rooms or the provision of special types of houses to deal with bad aspects has been avoided. Much has been found possible by close collaboration between the engineer and the architect to achieve the best results.

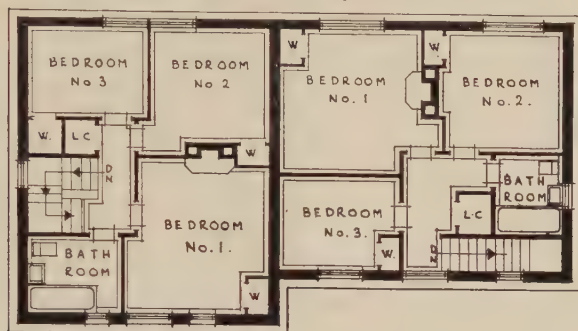
It will be observed that at Welwyn Garden City the practice has not been followed of providing frontage by cutting up sites into convenient patterns on paper, with some regard for drainage, and then proceeding to place blocks of houses around the frontage by measure; thus the drabness which is characteristic of many housing schemes has been avoided. There are examples where the necessary road lay-out is of such length, contour, and line as to allow for interesting grouping in bold form, including shallow courts, deep courts, and culs-de-sac in varying shapes, and in lay-outs of this character it has been possible to retain dignity and interest even though the same plan of house is repeated in considerable numbers. It is recognized that densely packed rows of blocks of houses are ugly and depressing, and that rows of houses slightly staggered are restless and ineffective.

Fencing and the lay-out of individual plots are vital to the general lay-out, as are also the planning and grouping of outbuildings. Experience showed that the provision of outbuildings was essential for all houses so as to prevent the erection by the tenants of necessary but unsightly sheds. The tenant needs a building for the storing of cycles, prams, and tools, and advantage may be taken of these outbuildings to form an integral part of the house grouping, thus making them convenient to the tenants and a means of screening and giving privacy to back gardens. Planting in relation to lay-out forms an essential part of the design itself and is not necessarily confined to rows of trees along the street verges. The architect has to attach as much importance to the grass verges, flower beds, and shrubberies as to tree groups or lines. It is quite easy to plant a nice

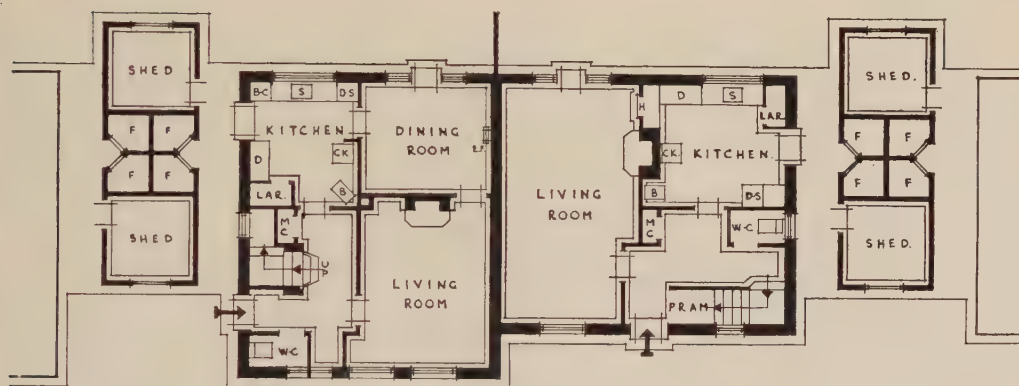


screen of small trees, only to find in a few years that they are above the house tops with a bare line of trunks where the screen was intended to be.

The various schemes have been governed by different factors so far as planning is



F I R S T F L O O R P L A N



G R O U N D F L O O R P L A N



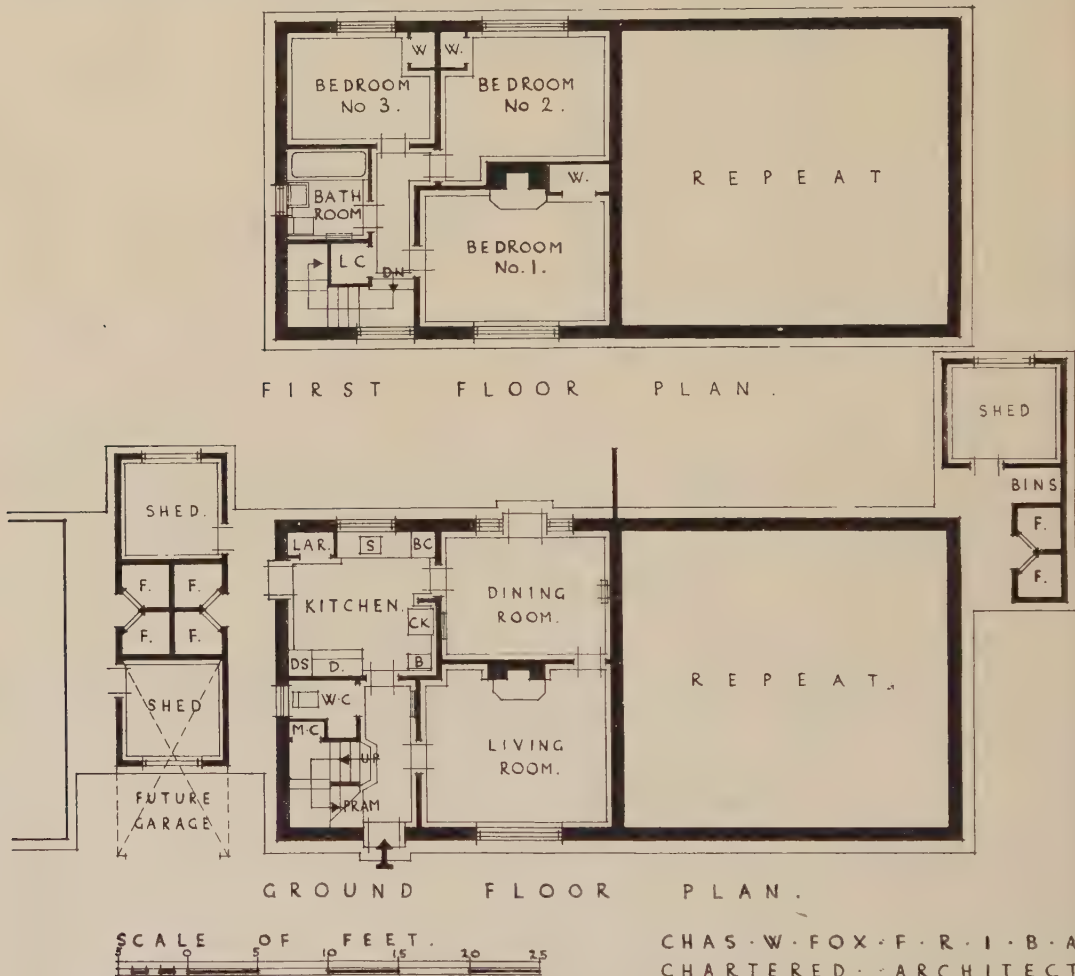
CHAS W. FOX F.R.I.B.A.  
CHARTERED ARCHITECT

THIS AND THE FOLLOWING FOUR PLANS ARE OF HOUSES IN THE DISTRICT COUNCIL'S LATEST HOUSING SCHEME (1947, IN PROGRESS) IN WOODHALL LANE, A SITE WITH A SOUTHERN ASPECT ADJOINING A PROPOSED SECONDARY SCHOOL SITE

The complete scheme is for 256 houses, in eight types with from two to four bedrooms, the basic unit being the three-bedroomed house of 950 superficial feet, which is illustrated. Included are thirty-two one-bedroomed flats. Each house has two hot-water radiators, and a completely fitted kitchen. There are serving hatches from the kitchen. The large living-room is liked by some tenants.

concerned, and a description of a scheme completed in 1937 is of interest as indicating the success that was achieved in what was aimed at. This was the work of C. W. Fox, who came to work in the town at an early date and became the council's housing architect. The scheme consisted of 110 houses, 8 flats for old people, and 12 garages. There were 19 parlour houses and 91 non-parlour, each having three bedrooms. The main point was to enable the house satisfactorily to fulfil the daily working conditions of the

home, the rooms being of such a size, shape, and position as to obtain this result, bearing in mind comfort and convenience coupled with economy of cost, and having regard last of all, so the architect declared, to external treatment. In the non-parlour houses, the



THE HOUSES ARE DESIGNED FOR DIFFERENT ASPECTS; COMPARE THE ONE ON THE OPPOSITE PAGE

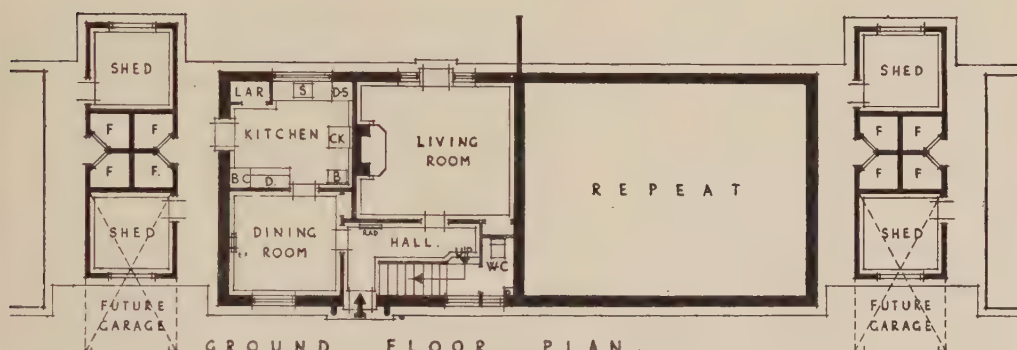
through-room plan was adopted; the parlour type houses in the scheme were sited in prominent positions, and the rooms obtained good aspects and open views.

In the preliminary studies for this scheme the question of the economic running of the houses was closely considered. A major factor was the question of heating, hot water supply, and cooking, and it was decided to adopt the back-to-back fire, which played an important part in governing the planning, inasmuch as the kitchen had to be next to the living-room. The fire-place in the living-room was planned in a recess to give a sitting

space screened from the door. Spacious fitted cupboards were provided, one on the ground floor of each house, two bedroom cupboards arranged next to the central flue, and hot airing cupboards on each landing. Each room was separately entered, and in no plan was any room used as a passage; the shape of the rooms, the positions of doors and windows were so designed as to give the maximum possibilities of convenient



FIRST FLOOR PLAN



GROUND FLOOR PLAN.



CHAS. W. FOX, F.R.I.B.A.  
CHARTERED ARCHITECT

THE HOUSES ARE DESIGNED FOR DIFFERENT ASPECTS; COMPARE THE ONE ON THE OPPOSITE PAGE

furniture arrangement. Each house had an outbuilding containing fuel store, cycle and pram space.

The construction was 11-inch cavity brick walls, faced with multi-red facing bricks; the roofs were covered with non-tearable felt and red pantiles; all roof spans were standard; the windows were good quality metal casements, large and with plenty of opening lights giving well lighted and ventilated rooms throughout. The doors and staircases were in pine. The ceilings were of plaster board and one coat of plaster, walls two coats of plaster.

The dwellings were occupied for several months before the walls and ceilings were decorated, thus allowing any small repairs to be conveniently carried out, this period acting as a drying time and permitting more effective decoration. The walls and ceilings



were then covered with light tones of washable distemper, while the kitchens, bathrooms, and w.c.s were painted in oil. Each internal door was fitted with a strong mortice latch: no locks are provided except to external doors.

The major equipment consisted of the back-to-back fire, with a normal fire and mantel surround to the living-room, and a range with oven and boiling top on the kitchen side, while the hot water boiler was placed centrally. The linen cupboard contained a combined tank system embodying cold water feed, calorifier, and hot water storage; the tank was in copper and connected with supplies from boiler to sink and bath; all the internal piping was carried out in copper tube and was concealed except at points of service; this was simple owing to the house design allowing of very short circuits. Thus from the one fire the living-room was heated, constant hot water provided to sink, bath, and basin, means of cooking provided, and the kitchen heated, while the central position of the fire kept the house warm generally. The tank being in the linen cupboard, there were no pipes in the roof space for awkward access or freezing. In each house provision was made for an electric or gas cooker and the services were installed ready for the hiring of a cooker as a secondary means of cooking during the short period of summer weather when it is not desirable to burn the fire all day; these points also served to connect a kettle, iron, or other appliance. Each room was fitted with electric light, power plugs were fitted on each landing and in each living-room, an electric fire installed in each parlour, and all fitted with a concealed aerial and earth system. The kitchens were equipped with well-ventilated larders, fitted dressers, deep sinks, and movable hardwood drainers with glazed tile surrounds, and portable electric coppers, while at convenient heights and positions shelving accommodation was arranged. The bathrooms have full-size modern bath and lavatory basin..

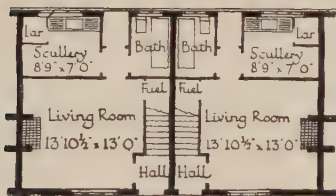
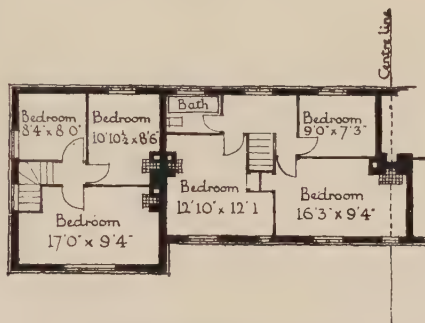
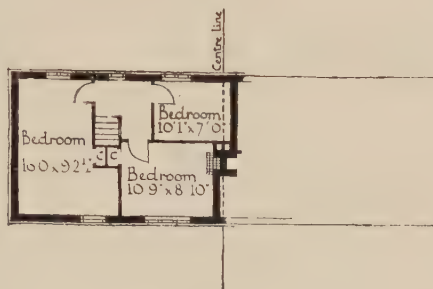
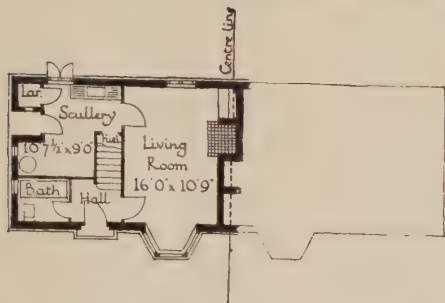
This well-thought-out scheme prepared the way for the post-war houses by the same architect, some of the plans and the lay-out of which are reproduced. In the older scheme a three-bedroomed parlour house had to kept down to an area of 850 super feet, but in the latest schemes 950 to 960 super feet are allowed. Furthermore, the equipment is improved and the kitchens have standardized fittings to the architect's design, including a dry-store cupboard and refrigerator unit.

As some tenants use motor cars in conjunction with their occupations and a serious demand for garage accommodation arose, the district council in 1936 dealt with this demand sympathetically, and study of the problem proved that the most satisfactory and economical method was to group a number of garages in central positions in units of six or twelve with the necessary paved areas for washing.

It is an exception to find the gardens of these small houses not well cultivated. The greatest difficulty arises when the tenant is a widow. A gardens competition was, before the war, held each year, at which a cup, prizes, and certificates were awarded for the best-kept gardens. There has been a demand for both large and small gardens.

As Welwyn Garden City is designed as a community composed of all classes, the housing schemes have the same general appearance and are equally as pleasing as the

rest of the town, so that there is at least an aim at real unity of character. The working-class population does not, however, so readily assimilate itself with the community as the middle-class, and as the proportion of working-class inhabitants is increasing the problems of the community are increasing too. The council has not hitherto had a



WELWYN PUBLIC UTILITY SOCIETY'S SCHEME FOR 450 HOUSES (1925)

These houses are built in poured concrete in order to utilize unskilled labour. They are more amply planned than the contemporary cottages built by the district council.

*Louis de Soissons, Architect*

welfare worker on its staff, but experience has for some time pointed to the desirability of such an appointment.

### § 13

Owing to the great delays in connection with the district council's schemes, the company determined at the close of 1924 to take advantage of recent housing legislation and to build itself. A scheme for 450 houses was therefore prepared by the architect, in association with the building organization, and a society called the Welwyn Public Utility Society was formed to build with the assistance of loans under the Housing Acts.

The houses consisted of living-room, parlour, scullery, and three bedrooms as the normal type, a few houses having two bedrooms and others having four. A proportion of the houses were without parlours. The gardens varied from a tenth to a twelfth of an acre and adjoined the houses. Building was in concrete, with steel casements and red-tiled roofs, but it was not successful as a building scheme, and presented the company with serious maintenance problems.

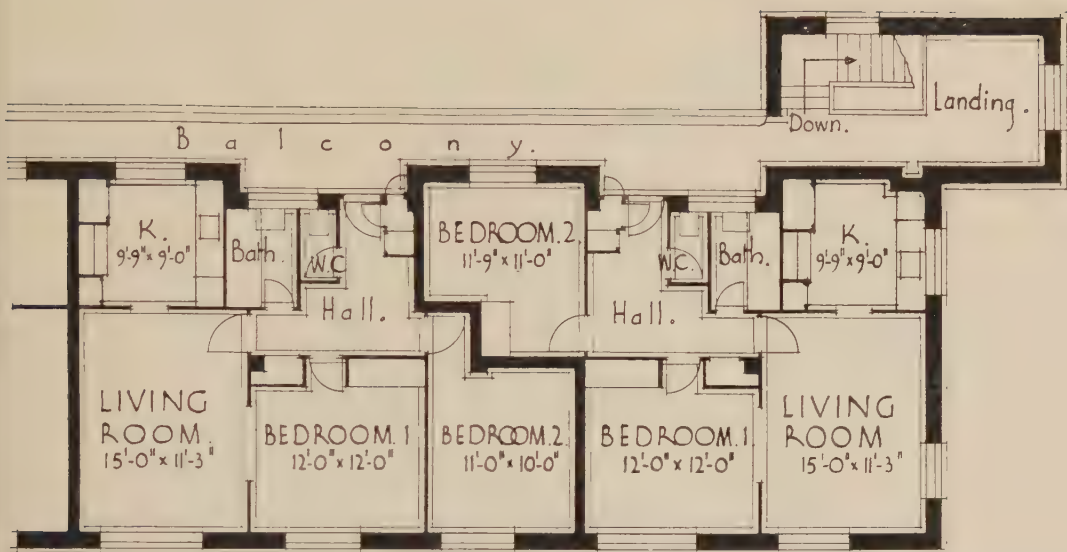
The finance of this scheme may be worth noting. The average cost of the houses was £497 each, to which was added the cost of the land and the construction of roads and sewers, £50, architect's and legal fees, etc., £17, a total of £564. Under the Housing Act of 1923 the society was entitled to a subsidy of £6 per annum for twenty years for each house, which was capitalized for a sum of £77, bringing the net cost down to £487. The society was able to obtain a loan of £430 under the Housing Act, 1924, s. 5, leaving £57 to be found by the society in 6 per cent loan stock. The loan charges, repairs, collection, etc., amounted to an average of 13s. per week per house, plus 3s. 7d. for rates and water, a total of 16s. 7d. a week. As the rental value to the tenant varied with the size and number of the rooms, the rents were fixed, including rates, at from 13s. 6d. to 19s. 6d. per week, which was considerably in excess of what comparable houses could be let for by the local authority. But the houses were quickly taken, of course. After this experience the company went in for a policy of building houses to let of a somewhat more pretentious appearance than those of the local authority, and of course at a higher rent, which proved successful, for the demand was never satisfied, until the war stopped building. An example of post-war building by the company is illustrated; these houses and flats are to be completed by the new development corporation.

#### § 14

The opening of gravel and sand pits for road-making and building purposes was, of course, an early activity. There were deposits of gravel and sand in various parts of the estate, and after a survey had been made, the company opened a number of pits in places where the excavations would be the least injurious to its scheme. The exploitations of gravel and sand deposits can be a very serious detriment to the amenities of a district, as many places in the neighbourhood of London have discovered. At the same time the presence of this material is of great economic advantage to development works. The largest gravel works set up by the company was at Twentieth Mile, where a gravel crushing, washing, and grading plant was erected. The land was well worked and almost exhausted when it was taken over by the R.A.F. during the second war for the purposes of a training unit. Now, it cannot be used again, and will be redesigned as a public park for the town. The company does not propose to open up other pits but to depend upon outside supplies.

The presence of brick-earth was proved, and a brickworks was set up in the Sherrards Park Wood area for hand-making a red facing brick. When the use of this land became inconvenient a semi-mechanical plant was established on another site near the gravel pit

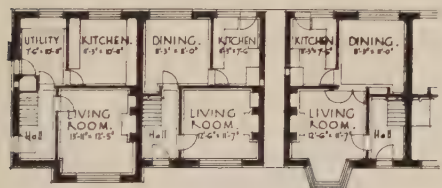




A SMALL UNIT BY THE GARDEN CITY COMPANY OF THREE-BEDROOMED HOUSES IN THREE TYPES, AND TWO- AND THREE-STOREY TWO- AND THREE-BEDROOMED FLATS, WITH GARAGES AND A RESTAURANT (1946, IN PROGRESS), ON HOMESTEAD LANE AND COLE GREEN LANE

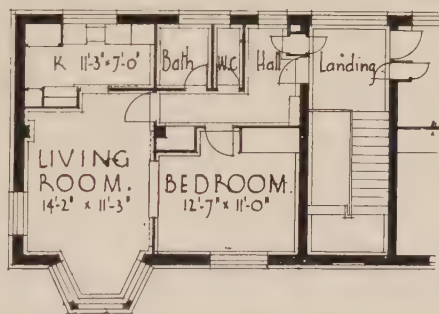


FIRST FLOOR PLAN.



GROUND FLOOR PLAN a 145

TYPES OF THREE-BEDROOMED HOUSES  
IN THE COMPANY'S SCHEME



A TYPE OF TWO-ROOMED FLAT IN THE  
COMPANY'S SCHEME

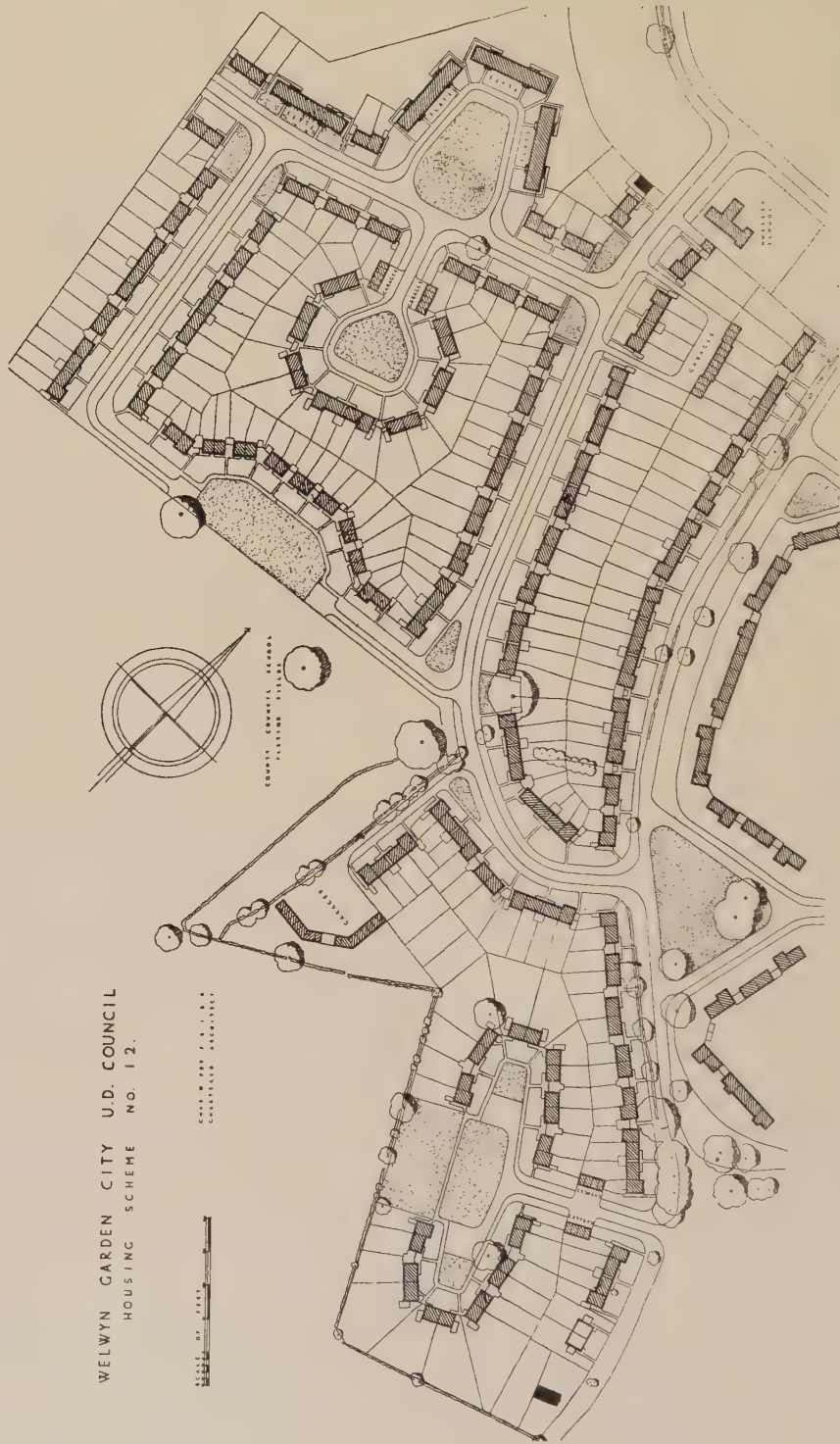
*Louis de Soissons, Architect*

WELWYN GARDEN CITY U.D. COUNCIL  
HOUSING SCHEME NO. 12.

SCALE OF FEET  
0 10 20 30 40 50 60 70 80 90 100



COUNTY COUNCIL, BEDFORD  
PLANNING DEPARTMENT



AN INTERESTING LAY-OUT OF A COUNCIL SCHEME ON AN IRREGULARLY SHAPED SITE IN WHICH THE PROBLEMS PRESENTED WERE SUCCESSFULLY OVERCOME (1947, IN PROGRESS). C. W. Fox, Architect

mentioned above, but on the east of the railway, where there was brick earth and where clay washed out of the ground could be used; this works is still being operated, there being sufficient clay for three million bricks a year for the next ten years. The clay is of high quality, and the company felt justified in continuing to use it for brick-making.



LAY-OUT OF A SITE FOR THE GARDEN CITY COMPANY (1946, IN PROGRESS)

### § 15

The early residents, apart from the staff and workmen of the company, were middle-class people who wanted houses near London. The facilities offered by the new town in the way of train service and other public services were necessarily restricted to begin with, but they were sufficient to make it possible to live there, and the first comers had the vision to see what the town was likely to become. An active policy of building stimulated growth and created confidence, and the population steadily increased. At June 1947 the total number of houses in the town was as follows:

#### *Weekly rented*

Urban District Council	.	.	.	.	1,496	
Garden City Company	.	.	.	.	1,342	
						<hr/> 2,838

#### *Monthly and longer tenancies*

Garden City Company (and associated companies)	.					<hr/> 725
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<i>Total rented houses</i>	.	.	.	.	.	.	3,563
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<i>Privately owned houses</i>	.	.	.	.	.	.	1,008
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							<hr/> 4,571
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## § 16

When the estate was purchased, part of it was in the parishes of Digswell and Welwyn in the rural district of Welwyn, part in the parish and rural district of Hatfield, and a small part in the parish of Tewin in the rural district of Hertford. One of the difficulties of its local government was that the estate was about equally divided between the two rural districts of Hatfield and Welwyn, the latter being one of the smallest rural districts in the country, with an area of only 6,480 acres. The new civil parish had to be wholly in either Hatfield or Welwyn district, but for the latter to lose one-sixth of its entire area would have meant that the remaining part would soon have been absorbed by another district. To get over the difficulty it was agreed that Welwyn and Hatfield should be united as a poor-law union, thus bringing the garden city estate into one union, and that the Welwyn rural district should absorb the whole of the estate. The whole of the Welwyn Garden City area was then, by the order of the Ministry of Health, made a new civil parish under the name of Welwyn Garden City in the rural district of Welwyn, with a parish council.

Although the Welwyn rural district is so small, the centre of the garden city is more than two miles by road from the small town of Welwyn, and there is a marked sense of distance between the two places; this affected the interest taken by the rural district council in the new development. To enable the working of the local government administration to proceed more easily it was decided in 1924 to create a parochial committee under the Public Health Act of 1875, consisting of the four district councillors representing the Welwyn Garden City parish and all the members of the Welwyn Garden City Parish Council, the clerk to the district council acting as clerk to the committee, with the clerk to the parish council as assistant clerk. The matters with which the parochial committee dealt were: (1) The management of the council's houses at Welwyn Garden City. (2) Refuse disposal. (3) Consideration of plans submitted. (4) Highways.

The actions of the parochial committee had to be confirmed by the district council. The position was not an easy one. The rural district council was uninterested when it was not antagonistic; for some of its prominent residents thought that the socialism and the industries of the new town would spoil their pleasant and somewhat isolated countryside. In 1927, therefore, it was with relief that the rural district got freed from the garden city when the new urban district was created, though the area detached from the rural district made that small district even smaller. Thus Welwyn Garden City became a local government entity responsible for its own self-government within the limits of the powers of a district council.

## § 17

When the parish council was formed, the garden city company had agreed that its secretary should act as clerk to the council, and, with the formation of the urban district council, the company's secretary continued as clerk, while its accountant became rating and finance officer, and its engineer, surveyor to the council. Thus the administration of company and local authority was brought into the same hands. Under the constitution of the company, the local authority had been given the right to appoint three of its members upon the board of the company to serve as directors, which had been acted upon when the parish council was formed. So the company and the district council were closely linked together. The 'civic directors' were appointed with the object of getting the residents interested in what the company was doing, and of bringing their influence to bear upon the company's policy. The joint officials system was the outcome of ideas of economy and efficiency; for it was thought that the work of the local authority would be better done by the company's staff than by officials who would probably have been but part-time and could anyhow have been paid only small salaries. The ideas were good; but there can be no doubt that, while a certain amount of administrative ease was secured, it was at the cost of real interaction between the company and the council, and a vital relationship was not secured, for the company being the stronger dominated the council. The 'civic directors,' though they attended the meetings of the board and received its minutes and reports in the same way as other directors, played no intimate part in the company's affairs, for in fact they had had no responsibility for them; to what extent their presence on the board furthered understanding between the residents and the company is a matter of doubt. There is no evidence that there was any such result. Furthermore, the joint officials arrangement meant that the officials had two masters, and that men cannot serve two masters is well known. The officials were able to choose to which master they should give their best service, and, though they were honest and devoted men, they acted in the end as it suited themselves. In the long run, the total effect of the experiment was to the company's disadvantage, and it did not fulfil what was hoped from it. In 1930 the district council appointed a separate full-time clerk, the office of rating and finance officer having already been amalgamated with that of clerk, while the engineer continued as a joint official until 1936, when conditions made necessary the termination of the agreement. The appointment of civic directors was ended in 1934, without any protest from the town, which was evidence of its uselessness. How those who come to live in a new town can be got to co-operate with the body responsible for its creation is a problem by no means easy to solve; it has not been solved at Welwyn Garden City.

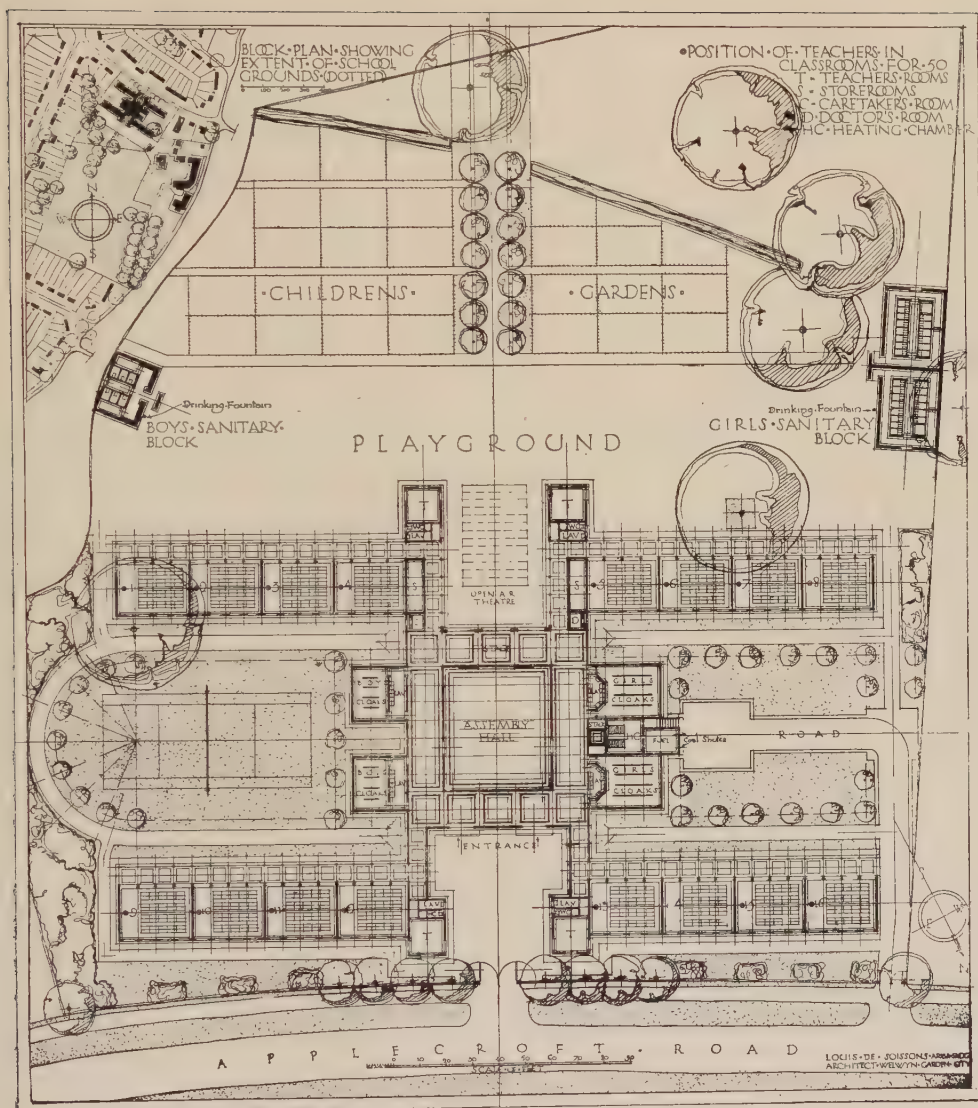
## § 18

The Hertfordshire County Council was concerned with the new town, being, among other things, the education authority. The council already had experience of the first garden city at Letchworth, and was by no means unsympathetic to the idea of a second garden city being developed in its area. Its attitude, however, was cautious and non-committal, though it perhaps did not lose sight of the value to the county of garden city development as a defence against the encroachments of Greater London.

## § 19

It was natural that education should have been given attention at an early stage, for the garden city was above all for the young. The Hertfordshire County Council, as the education authority, was at once prepared to take up the question of building a school, and a site of about three acres was selected as soon as development started. The garden city company was anxious to encourage the best educational facilities in the town, and many discussions took place between the representatives of the County Education Committee, the Board of Education, and the company's directors and officials. The high cost of school buildings and the high wave of economy that was passing over the country at the time had some influence on these discussions; but the authorities were really sympathetic, and when the company's architect, having made a study of the best examples of school planning in this country and abroad, submitted a design that combined an advanced type of school building with a comparatively low cost, the scheme was considered practicable, and the county council decided to proceed with it at once. The school is a single-storey building arranged in four sections with an assembly hall in the centre. The first unit, constructed in 1923, consisted of two sections, and was carried out at a cost of £9,030, equivalent to £22 10s. per school place. The two final sections were built in due course. The design of the school was intended to provide the maximum of fresh air, to make a light and cheerful building, and was a pleasant contrast to the school buildings in the official style that followed it. Each classroom had the main light on the north side, and opened on to a covered veranda on the south side by means of folding glass doors. In suitable weather these doors were kept open and the whole school was practically converted into an open-air school. At other times each room was assured of through ventilation; the central low-pressure heating system ensured an equable distribution of heat, and gave a classroom temperature of 60° Fahrenheit when the outside temperature was 25°. The heating system was used for the drying of boots and coats in the cloak-rooms. The two end rooms of each wing, or section, were separated by folding partitions, thus providing space for school assemblies and indoor games pending the erection of the hall. Between the two wings was a partially enclosed space which was intended for use as an open-air theatre or outdoor hall, on each side of which was a staff-room opening to the playground.





WELWYN GARDEN CITY COUNTY ELEMENTARY SCHOOL  
(First unit 1923; completed 1925.)

The construction of the first unit was of timber and concrete blocks, for the sake of economy, and both the walls and the flat roof contained an air space, which deadened sound and helped to maintain an equable internal temperature. The colouring of the school was bright.

The school stands upon a high and well-wooded site, which provides not only a playground, but also about a quarter of an acre of school gardens, and ornamental grounds planted with flowering trees and shrubs, and flower borders. The Welwyn Garden City Educational Association, formed by some of the directors and others interested in education to foster and unify educational work in the town, directed its attention to assisting the school managers to make the first school so efficient and attractive that most of the parents in the town would be glad to make use of it. A 'school development fund' was opened to augment the provision made from the rates and taxes, and an appeal was made to parents and others for the sum of £500 a year for five years. The garden city company agreed to contribute £100 a year for five years to the school managers to supplement the headmaster's salary, substantial help was offered by the New Town Trust and the Rowntree Trust; but more than half of the fund was made up by contributions from individual parents (some of whom voluntarily paid fees such as would be paid at a private school) and other residents. This fund made possible the strengthening of the staff and equipment of the school in a number of ways. But as at Letchworth, the attempt did not succeed, though for as long as it lasted it was well worth making.

This first school has been reclassified as a 'secondary modern school'; it has a roll of 500. There is a primary school for children from eight to eleven years of age with a roll of 580, at Peartree, which has a small amount of playing fields. Another primary school is at Ludwick Way for children from five to eight, with a roll of 350, and a playing field. A third primary school is on Parkway for children from five to eleven, with a roll of 570, and a playing field.

The county council has also erected a grammar school, on a large site on the outskirts of the town; it is co-educational, with a roll of 360. There is one nursery school for children from two to five; two war-time day nurseries were started and are still operating. Other schools are projected. There is a private co-educational school, and several small private schools.

## § 20

The first church building was the St. Francis Hall, built in 1923 as a first unit of a church on a site taken for the Church of England. The first part of the church itself was built in 1935. A second church, in Peartree, had its first unit built in 1929. The Roman Catholic Church (1926), the Free Church (1929), the Society of Friends (1925), Congregationalist (1923), Baptist (1937), Methodist (1944), and other religious bodies have temporary or permanent buildings. The question of church bells was given

some attention, because there was a strong feeling against bell-ringing, and the parish council passed a resolution suggesting that the use of 'calling bells' should not be permitted. Prolonged negotiations followed with religious bodies. Finally the Roman Catholic authorities agreed:

Not to ring or allow to be rung any bell or peal of bells on the premises at such times or for such periods or in such manner as to cause the same to be a nuisance or annoyance to or an interference with the comfort or amenities of the inhabitants of Welwyn Garden City residing in the neighbourhood.

The Church of England agreed to a similar restriction. The Free Church agreed to have no bells without consent.

## § 21

From the start an effort was made to bring under one general organization the voluntary health services of the town, including those for which grants from public sources could be obtained; so that a Health Council was formed with the work divided between two committees: (a) hospital and (b) maternity, child welfare, and district nursing. But after a time it was found more convenient to form two organizations, one called the Hospital Association, the other the Health Association. It is a significant comment on this division that the national health scheme separates administration under these two headings, the hospital service being national and regional, the group of functions performed by the Health Association being under the administration of the county council.

At Welwyn Garden City, as a result of the Health Association covering all health services other than the hospital, not merely, as in most other places, only district nursing, various services were initiated earlier than elsewhere in Hertfordshire. Thus the town had dental clinics for school children and for expectant and nursing mothers before this service was generally available, and a home help service many years before it existed elsewhere. Throughout, there has been a close integration of district nursing, midwifery, ante-natal and infant welfare clinical work, massage and similar treatments, and a recent innovation is a clinic for mothers having difficulties in managing small children. Another feature worth noticing is that as a result of having a large number of voluntary workers and continuous propaganda a larger proportion of mothers bring their babies to welfare clinics than in most places. The Health Association has now a staff of seven.

All work has had to be done in buildings not exclusively used for health purposes. The Health Association had before the war induced the county council to agree to build a special health centre and plans had been prepared when the war broke out; building difficulties prevented its construction, but on the initiative of the Health Association an extension has been made to the community centre to house certain of the clinics.



The following tables set out the available figures relating to the vital health statistics of the town:

Year	BIRTHS			DEATHS			DEATHS OF INFANTS UNDER 1 YEAR OF AGE	
	Legitimate	Illegitimate	Rate per 1,000 of Population	Male	Female	Rate per 1,000 of Population	No.	Rate per 1,000 Births
1927	105	3	21.4	11	14	5.0	2	18.51
1928	159	3	20.7	29	16	5.79	1	6.17
1929	191	4	24.15	24	26	6.19	7	35.89
1930	155	6	19.82	26	23	6.06	7	43.4
1931	184	4	21.85	20	24	5.11	1	5.3
1932	162	10	19.1	27	30	6.3	7	46.0
1933	169	1	18.3	26	29	5.9	4	23.0
1934	186	5	20.2	24	22	5.1	3	15.7
1935	189	10	19.8	35	25	7.4	7	35.0
1936	217	6	20.8	37	40	9.1	14	62.8
1937	236	8	21.5	45	37	9.8	12	49.2
1938	220	3	16.2	45	45	8.1	7	31.4
1939	292		15.7		89	7.48	9	30.6
1940	287	5	17.17	60	69	10.1	17	58.2
1941	449	10	16.3		128	7.2	10	35.2
1942	488	18	17.44	69	62	7.25	15	48.4
1943	326	19	20.00		135	7.54	6	17.39
1944	367	25	22.82		131	7.42	11	28.06
1945	313	31	19.87	73	50	7.10	17	49.42

*Vital Statistics for the Year 1946*

The estimated population at mid 1946	.	.	.	17,730
Number of deaths from all causes	.	.	.	114
Number of live births	.	.	.	428
Number of still births	.	.	.	7
Number of deaths of infants under 1 year	.	.	.	12
Live birth rate per 1,000 of the population	.	.	.	24.8
Still birth rate per 1,000 live and still births	.	.	.	16.09
Crude death rate per 1,000 of the population	.	.	.	6.44
Death rate of all infants per 1,000 live births	.	.	.	28.03

§ 22

An interesting feature of Welwyn life was the Central Civic Fund started in 1927 for the purpose of raising money jointly for various social organizations providing services not organized on a sectarian or political basis. The bodies included have been the hospital, the Health Association, the Educational Association, the Boys' Club, the Guild of Help, and the St. John Ambulance Brigade. Money was raised from two sources: (a) voluntary contributions, (b) where the contributor received in return for a small weekly payment hospital and other health services. The latter differed from most other contributory schemes in that a portion of the contributions was used for the general purposes of all

the organizations participating, not purely for hospital purposes. Arrangements were made with employers to make themselves responsible for collecting the contributions from their workers, and to pay a contribution themselves, thus relieving themselves of direct appeals for donations from any of the participating bodies. In 1943 it was found convenient to separate the contributory from the voluntary scheme, when the former was termed the Contributory Scheme and the latter the Community Trust. The joint income of these two bodies amounted to over £4,000 a year. It was contended that the existence of this scheme enabled the various participating bodies to secure more money and to operate more efficiently than without it. In particular it was one of the reasons why Welwyn Garden City has had for years a large boys' club while towns such as St. Albans and Watford have not. When the National Health Service came into operation the Contributory Scheme was wound up but the Community Trust continues.

### § 23

Various boys' clubs were in existence from a fairly early date in the history of the town, operating one or two nights a week, but without their own premises. In 1935, however, the Peartree Club House, owned by the Educational Association, the building of which had been largely financed by the company, was made available for a full-time boys' club owing to the urban district council having built the Peartree Community Centre. Thus the boys' club was put on a basis that allowed for a full-time warden. The building was extended twice before the war and now has the largest floor area of any community building in the town. It is organized into a main club for boys between fourteen and eighteen, a smaller junior club for boys from twelve to fourteen, and an old boys' club for those who were members of the main club but have passed the age of eighteen. The total membership is over three hundred. In addition to a gymnasium, used for physical training and boxing, there are two billiard-rooms, an old boys' lounge, a general games room, a library, and a craft-room. The club has eight football teams, which play on Saturday afternoons, and has become without doubt the leading club in the county, with far better premises than any other. The extensions to the building were financed by the company in the main with loans free of interest. The community trust and the company contribute substantially to its annual expenses and a grant is obtained from the county council.

Since 1946 the education authority has been using the club premises during the day as a further education centre, and boys and girls from the town's factories are having what is equivalent to one full day's education per week during working hours. It is believed that there is no other place in the country where there is a similar integration between education and a boys' club. It is being found of advantage to both bodies.

There are two other full-time youth clubs. One, a mixed club, operating with a full-time warden at Trevelyan House, affiliated to the Y.W.C.A. but now an independent club. The other operates in a temporary building on the east side and is also a mixed

club, affiliated to the Y.M.C.A. These clubs have been in existence only a comparatively short time, but mention should be made of the St. Francis Boys' Club, which has been in existence for over twenty years, meeting two nights a week, with a voluntary warden.

## § 24

Before the end of 1920 the first of the important subsidiary enterprises of the garden city company was formed in the Welwyn Restaurants Ltd. (this company preceded the building company in point of time). The restaurant company erected a building opposite the temporary station to supply visitors and others with meals and entertainment and to serve as a social centre for the town. The Cherry Tree Restaurant was opened at Easter 1921, and the original and interesting architectural treatment of the building aroused immediate interest. The restaurant became at once a centre for meetings, parties, dances, and other gatherings, which had previously taken place in an old army hut which formed a wing of the company's offices. Two hard tennis courts were constructed by the company near the restaurant, and a tennis club was formed. At a public meeting of the residents a number of committees was set up to start a variety of activities, including drama, dance, chess, and music societies, etc. Application was made to the licensing justices for a licence for the restaurant, but was refused; the application was renewed the following year and then granted. The company did not follow the precedent set at Letchworth by taking a poll on the question of the licence, as the directors did not believe that it was right to confuse the significance of the garden city scheme with so highly controversial a subject as local option. The garden city company therefore retained a controlling interest in the restaurant company, provision being made for surplus profits to come to the parent company for the benefit of the town. The restaurant was conducted on the principle of disinterested management—that is, the management was given no interest in the sale of alcoholic drinks, and food and meals were obtainable at all times. An area of four acres of woodland was leased for the restaurant, and the open veranda upon which meals could be served for the greater part of the year made it an exceedingly pleasant spot. There was a billiard-room, and quoits, bowls, putting greens, and other games were provided. The 'Cherry Tree' gave the town its community centre, but in 1932, the temporary building requiring to be replaced by a permanent structure, the garden city company decided not to continue with its management and disposed of the undertaking to a firm of brewers, with the arrangement that further sites for licensed premises on the estate should be offered only to the same firm. A new Cherry Tree Restaurant was then erected, designed by R. J. Muir, but though it had more ample accommodation than the old building and has been successful, the charm and intimacy of the original building was lost, and the place did not maintain its special character as the town's social centre.

The company owned two original licensed inns on the estate, which it transferred to the same firm of brewers, and an application for a new licence in the Peartree area, which



the magistrates had previously refused to the company, was granted, and a large new inn was built and opened there in 1939.

A workmen's club under the control of the company was formed when development started, in response to the demand of the workmen, and this club was registered. It was closed, however, when the restaurant was licensed, and the company does not allow any premises to be used for the supply of intoxicants, in registered clubs or otherwise, except under its control.

## § 25

Halls for public meetings, concerts, and social gatherings had to be provided. To start with, the company offered a reconditioned army hut for the purpose, and soon the 'Cherry Tree' became available. Through the generosity of Miss A. J. Lawrence of Letchworth, the Lawrence Hall was built in 1921, and soon after a farm building was converted into the Backhouse Memorial Hall. As this accommodation was nothing like sufficient for the social activities of the new community, the Welwyn Stores built an extension to its premises in advance of its requirements, and allowed the building to be used as a meeting place for the time being. The club house at Peartree already referred to was built with the company's help, but there was nothing in the nature of a community centre, and no means of providing one, until in 1936 the district council as part of its housing schemes was able, under the Housing Act, to put up a hall and other rooms in the Woodhall area, known as the Community Centre. This is a valuable element in the town's social life, but the building is small and, serving only part of the town, cannot be said to meet its needs. There is a church hall at St. Francis's, also the Parkway Restaurant, which is used for large meetings and concerts, but the town remains lacking in anything approaching adequate means of social intercourse.

The company intended to retain for the town the control of cinemas and the profits from this form of entertainment, so that a cinema was started under the management of the restaurant company in the store building, and in 1927-8 the Welwyn Theatre was built by the company, from designs by Louis de Soissons. It was a long plain building, the auditorium being 66 feet wide and 95 feet long, with a balcony, and seating for about 1,200. This was too long a building for a theatre, but its main use was to be a cinema, though it had a fully equipped stage for plays, as there was a plan to make Welwyn Garden City a theatrical centre based on the theatre. An amateur repertory company was formed with the object of playing at the theatre in association with the cinema management, but, although an interesting opening performance was given, the enterprise came to a sudden end, and the theatre became a cinema occasionally hired to amateurs for their plays. In 1936 the garden city company, not being able to run the cinema successfully, sold the theatre to a local circuit and gave the same circuit rights over future cinema sites. This is to be regarded as a serious error of judgment, for not only did the company part with a valuable means of revenue but it set up a monopoly which prevented a film society, desired by some of the residents, from operating.

To meet some part of the need for amateur drama, which has been an active interest at Welwyn Garden City since the town's inception, a farm building was converted into the Barn Theatre, at about the same time as the cinema was disposed of, and this theatre was soon in constant use. Taken for other purposes during the war, the Barn was brought to its proper function again in 1946 through the work of the amateurs themselves; although small it has a place in the town's social life. An attempt to establish a professional repertory company there was made in the spring of 1947; but it could not succeed, for the building was inadequate and the population of the town too small.

A local newspaper was founded when the Welwyn Stores was started. As such newspapers depend upon advertisements from tradesmen, and as there were few such advertisers available in the new town, the stores itself took up the duty of providing the weekly paper, which it did at its own cost, delivering one copy of the *Welwyn Garden City News* to each house in the town, and putting copies on sale. The paper began as a single sheet, as the population was only a few hundreds, but grew and became a normal local newspaper, the free distribution being discontinued after some years. Although the paper belonged to the stores and was run at its expense, it was conducted on the principle of editorial independence, and advertisements from outside competing traders were accepted. Coincident with the starting of the *News*, an independent paper called the *Pilot* was published by one of the residents with the object of attacking the garden city company's shopping policy, and providing an organ of criticism of the company in general. This paper depended upon the advertising support of tradesmen in the surrounding towns, and, being run with considerable energy, as the proprietor wanted to make a living out of it, and maintaining a lively and persistent defence of the supposed interests of those who had no intention of setting up business in the town, it was able to keep going. An organ of opposition was recognized to be a good thing, however, and although the *News* printed without restriction letters from critical or dissatisfied people, an independent press undoubtedly performed a service. There were old-established local newspapers issued from St. Albans and Hertford; but they could not exert the influence of a paper produced locally. An outlet for criticism, though based upon misunderstanding, even when captious or simply malicious, is of value to a community, and this at least the *Pilot* provided. In 1928, however, its criticism not being any further welcomed by the company, the newspaper was bought up and amalgamated with the *News*, a new publication entitled the *Welwyn Times* being issued, with a board of directors on which some residents served; but the new paper remained none the less under the control of the company. Although it has in the course of time and under the conditions brought about by the war become well established, the *Welwyn Times*, as the company's organ, presents local news in a way considered to suit its interests, and hardly provides a means of objective news reporting, which must be considered, in some respects at any rate, to be a disadvantage to the town.

## § 26

The name of the town gave rise to a certain amount of discussion. The directors of the company had adopted the name of Welwyn Garden City because it both described their scheme and indicated its location; they recognized that it was lengthy, and that the term 'garden city' having been used by building developments that were not entitled to it was misunderstood, and on other grounds was disliked, but these objections were not considered weighty enough to reduce the great value that they believed the name to possess. In 1924 the parish council called a meeting of the inhabitants to discuss the name, and the meeting was practically unanimous in the desire to retain it. The subject has come up for discussion several times since, always with the same result.

## § 27

The growth of the town is shown by the following table:

<i>Year</i>	<i>Number of New Buildings<sup>1</sup></i>	<i>Population<sup>2</sup></i>
1920	136	430
1921	262	851
1922	438	1,417
1923	658	1,893
1924	919	2,584
1925	1,147	3,575
1926	1,671	5,100
1927	1,946	6,600
1928	2,065	7,000
1929	2,175	7,583
1930	2,542	8,540
1931	2,654	9,125
1932	2,678	9,250
1933	2,771	9,587
1934	2,804	10,200
1935	2,961	10,950
1936	3,202	12,250
1937	3,554	13,500
1938	3,930	14,150
1939	4,143	14,915
1940	4,194	20,000 <sup>3</sup>
1941	There are no reliable statistics for this period; the fluctuations were marked, with a peak war population not recorded.	
1942		
1943		
1944		
1945		
1946	4,571	17,750
1947	4,695	18,000

<sup>1</sup> From 1920 to 1924 the buildings in course of erection are included, after that date the total is for residential buildings completed.

<sup>2</sup> The original population of 400 is included.

<sup>3</sup> The town was greatly overcrowded during the war because of the presence of 18,000 evacuated children and others and from the direction of war-workers; it remains overcrowded at the moment of writing (1949), there being about 1,000 more people in the place than can be adequately housed.



## § 28

Welwyn Garden City was embarked upon at a time when almost everything was against its success. Prices were high, economic conditions were unstable, and there was a general pessimism throughout the country as to the condition of trade and, indeed, as to the national outlook altogether, much worse than in 1949. The difficulties were enormous; but the promoters believed that the scheme was sound, that if carried through with sufficient determination it could be made of the utmost value to the country, and that the hope of the future was in such communities as they desired to establish. In the remaining part of this book we shall discuss in some detail further aspects of the growth of the town. What has to be learned from it is of the utmost value. In some important respects the experience of Letchworth was repeated, but, in others, Welwyn has made its own contribution. As those who engage in it discover and are never allowed to forget, the building of a town demands not only technical skill but understanding of human nature, for what has to be done is not merely the development of land and buildings, and what has to be gathered together is not simply a collection of people, but a community has to be created. Thus we are brought fully into the field of sociology, and while that science is still in its rudimentary stages what the garden cities provide for those who engage in its study is of unique value. At Welwyn Garden City, as at Letchworth, we see a community in the process of growth from the embryo, and because the early stages of the growth of any organism are the most important, the examination of the early years of these two towns is full of interest for the social observer. Of course, each town is small, and, because of that, some observers have turned away with impatience; but beginnings are always small, their examination needs patience and powers of perception, so that the seeing eye and understanding mind are required to grasp the significance of the development of the seed and the emergence of the organism into youth and maturity. And because a town is not a mere natural growth, but owes its existence as an organism also to art and the wills of individual men, the observation that it calls for is that of perception of the highest order, as well as sympathy that is not distinguishable from love.

An addition has to be made to the above words because in October 1947 the Minister of Town and Country Planning announced that he proposed to take over the completion of Welwyn Garden City by setting up a development corporation under the New Towns Act, 1946. This is discussed at some length on another page; at this point it is sufficient to say that the proposal will decisively affect the future of the town. The minister made the order creating the development corporation in May 1948, and set up the corporation in the following month.

## CHAPTER II

### ITS TOWN-PLAN

That art will make our streets as beautiful as the woods, as elevating as the mountain-sides; it will be a pleasure and a rest, and not a weight upon the spirits to come from the open country into a town; every man's house will be fair and decent, soothing to his mind and helpful to his work. . . .

WILLIAM MORRIS, *Hopes and Fears for Art*

#### § 1

THE object of building Welwyn Garden City was to provide an illustration of a garden city having special relation to London. The town-plan had to provide for a definitely limited urban area surrounded by a rural belt. The limit of population for the urban area was fixed at 40,000, with the intention of increasing it to 50,000 if found practicable. The fundamental difficulty was that the site was not large enough for what the promoters considered necessary for their scheme. But they were unable immediately to extend the area to the east as they desired, and had to proceed with the land they had secured, which, as they had rubbed into them, was sufficient for a beginning. The whole of the estate was ideal for building and could have been laid out for residential purposes with great profit. The company's ambitious scheme, however, was to plan a town with industries, a commercial centre, and houses for all classes of the community: in short, to establish a town.

The main structure of the plan was settled by the site itself. There was never any question of attempting to make an ideal plan. Physical conditions suggested the general features of the lay-out; for what had attracted attention to the site even before the land was purchased were its railway facilities, its relation to London, and the suitability of certain land for factory development. The estate lay on both sides of the London and North-Eastern Railway main line; branch lines from the east and west met the main line in the centre, and ran alongside it for a distance of two and a half miles to the junction at Hatfield. The estate was therefore cut into four parts by railway lines. The Great North Road passed through a part of the estate and formed its western boundary for some distance; other roads running east and west touched it on the north and south. The comparatively short lengths of existing metalled roads on the estate itself were a marked feature of the estate in its original condition, though there was a number of unmetalled roads and many footpaths. There was considerable timber, chiefly oak, and the north-western section consisted largely of woods and parkland. Some parts of the woods had been cleared during the first war, and the work of tree felling was still in progress when the estate was purchased. Moreover, a large part of the remaining standing timber had actually been sold, but was bought back by the company at a high price, thus saving an area of picturesque country from being despoiled. Practically the whole centre and southern parts of the estate slope towards the south-east.

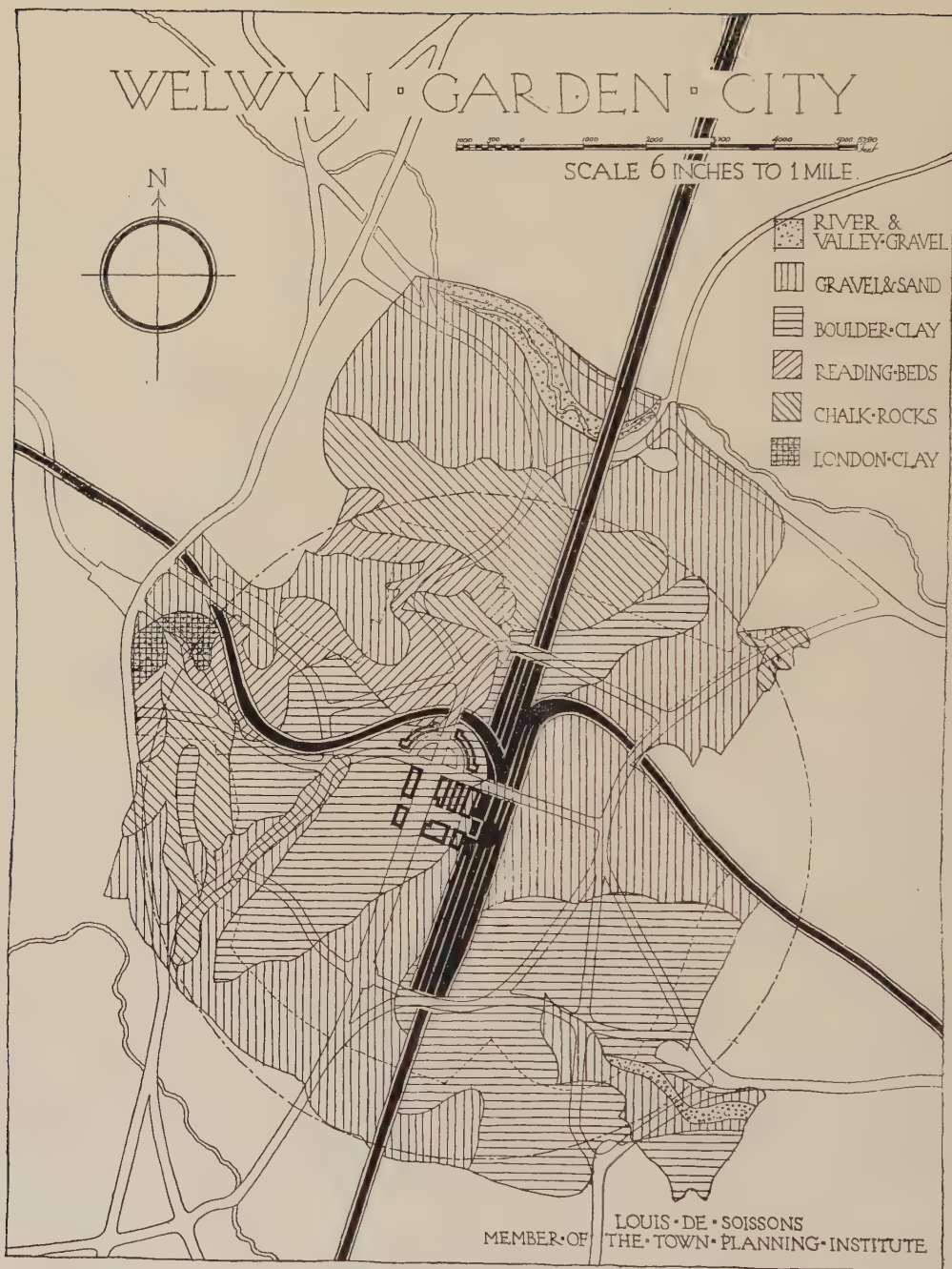


DIAGRAM OF GEOLOGICAL FORMATION



## § 2

The method adopted in planning the estate was to get a contour plan prepared, the water supply scheme and the main lines of the drainage scheme settled, a general survey made to enable the physical features of the site to be known sufficiently to decide upon the placing of the various parts of the town, and a mineral survey taken to discover the nature of the subsoil and the existence and position of deposits of gravel, sand, brick-earth, etc. A great deal can be done in this matter merely by means of the eye; for an experienced man who knows what to look for can roughly prepare the outline of a plan; but the actual detailed work which needs to be completed before any definite plan can be adopted means a great deal of labour, much time and expense. In the planning of a garden city the needs of a complete town have to be anticipated, and what the community will be likely to require in its public services has to be foreseen. It is necessary to decide what ultimate population is to be provided for and to take into account the character of the town and its probable future industries. The aim in preparing the plan of Welwyn Garden City was to take advantage of the strategic position of the site in relation to its railway and highway communications, and to keep the urban area as compact as possible, so that most of the houses would be kept within a short walking distance (say three-quarters of a mile) of the factories and the shops. The urban area, for a population of 40,000, including the factory, shopping, schools, and residential districts, was estimated to need an area of about 1,770 acres.

## § 3

The railways running through the estate consist of up and down main fast lines, up and down main goods lines, a single line to Hertford, and another single line to Dunstable. The width of the railway land was 130 feet. When the estate was purchased the railway directors demanded, as part of the consideration for starting a railway service, that the company should sell them at cost price the land required for future railway purposes. The garden city company therefore sold to the railway company an area of sixty-nine acres for the future railway station and goods yard, and for widening the branch lines to Hertford and Dunstable. The effect of that is that the railway company holds an area 650 feet wide through the centre of the town. The division of the town which results has had an important effect upon the town-plan. A belt of trees has been planted along both sides of the railway to screen it to some extent from the rest of the town. There were four existing bridges over the main line of railway, two on the southern part of the estate, a third almost in the centre, and a fourth slightly north of the last. The distance between the two middle bridges is one mile, and the railway company would not agree to a scheme for a fifth bridge between them, which seemed to the company to be an obvious necessity for bringing the two parts of the town together, so that the third bridge had to be depended upon as the main connection, with the second and fourth bridges as secondary means of access. The site of the permanent railway station was fixed, in agreement with the railway company, a little south of the third bridge.

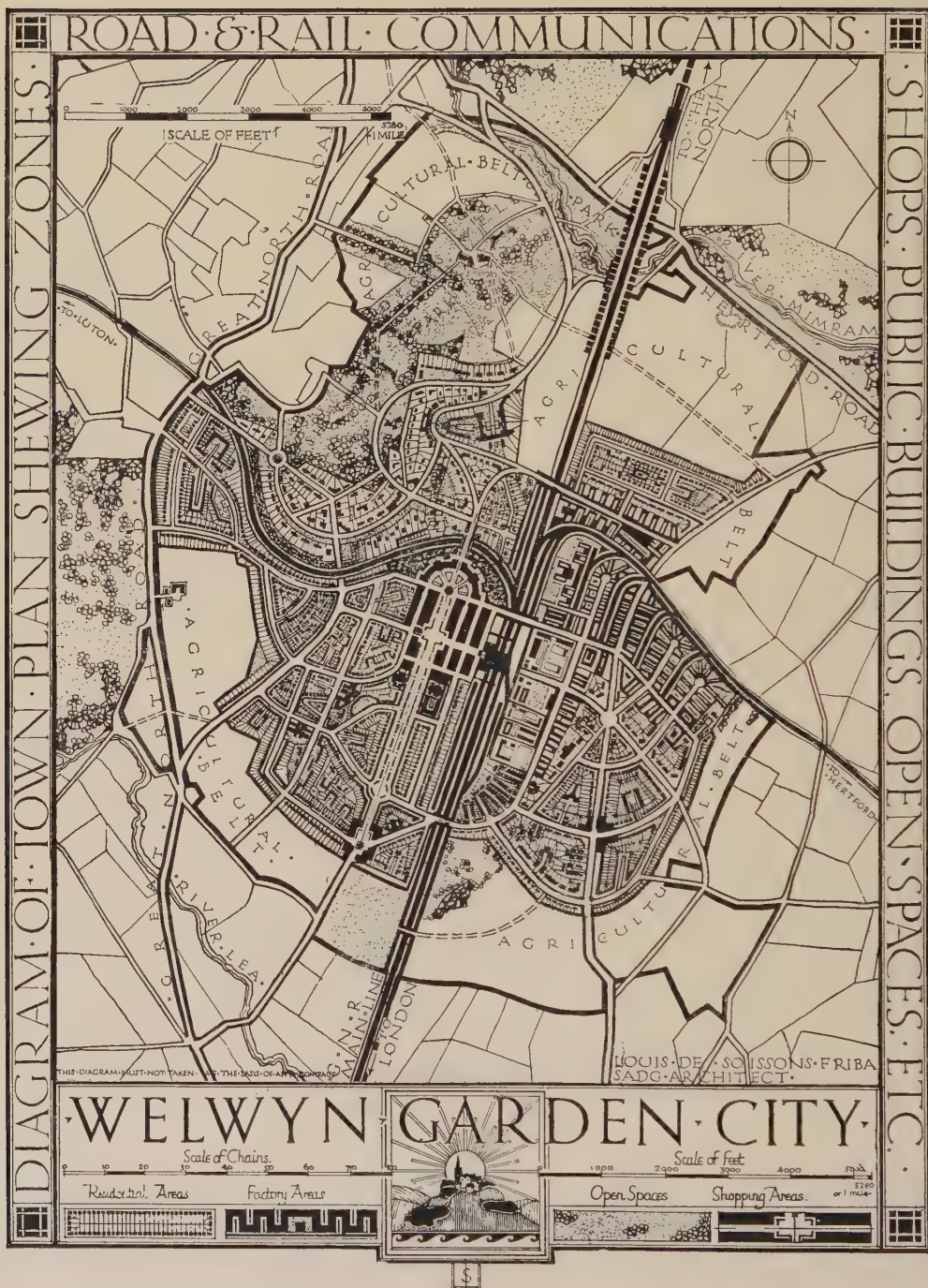


DIAGRAM OF THE ORIGINAL TOWN-PLAN (1920)



A sketch plan for the town was made in 1919 by the Letchworth architect C. M. Crickmer; but the company decided to have the town-plan prepared by its own staff, and with that object set up an architect's department with the young architect Louis de Soissons at its head. Mr. de Soissons had a brilliant academic record and was regarded as one of the architects of the future; with a strong personality, a lively and acute mind, and considerable ability in presenting his many ideas, he immediately established his position. The plan that he prepared has great merits, when it is considered that he was in many directions prevented from reaching desired solutions because of the limitations of the site and the company's position.

The town is planned roughly in circular form, the roads radiating approximately from the two middle bridges. These bridges, inadequate and inconvenient as they have always been, are indeed important factors in the town-plan, and must be considered as governing its main structure. The level land to the east of the railway and to the leeward of the future residential area was the site naturally designed for the factory area; it consists of 170 acres, is practically flat and on the same level as the railway; it is central, near the railway passenger station and within easy reach of the residential areas. On the west of the main railway line, in the bend of the branch line to Dunstable, the civic centre was placed, and on the same side, just south of the civic centre, was put the commercial and business centre. The public buildings, such as churches, halls, municipal buildings, etc., were kept out of the shopping and commercial area as far as possible, with a view to getting the utmost possible concentration of business premises; but there was also another reason for placing the civic centre where it comes in the plan. The civic buildings could only be erected gradually and as the town grew and reached its ultimate population, because there was no other way of providing them, so that the site for these buildings was placed slightly out of the centre of the town. The civic centre is therefore in a park, not so much to get the advantage of such a setting as to avoid too many large vacant spaces in the town centre.

The allocations of areas for various purposes could be made only approximately, the governing considerations being the land that could be developed most economically having regard to the company's resources, the fact that additional land would have to be acquired to complete the scheme, and, of course, the essential elements of the garden city that it should provide for houses, industry, commerce, and agriculture. The original allocations for a population of 40,000 were therefore as follows:

	<i>Acres</i>
Residential, including small open spaces . . . . .	1,298
Industrial . . . . .	170
Central civic and commercial . . . . .	80
Schools . . . . .	150
Parks and rural belt . . . . .	608
Railway land . . . . .	72
Total area of original estate . . . . .	2,378



These allocations were not regarded as final, and certainly not as ideal, but as a practical attempt to deal with the planning problem, and adjustments have been made from time to time. The residential area was regarded as elastic, and the rural belt was little more than an acknowledgment of the principle; but the comparatively large area devoted to central civic and commercial purposes shows what was definitely in mind at the inception of the scheme as to the future size of the town. The railway land was the amount the railway company demanded.

#### § 4

The industrial, business, and civic areas made the heart of the plan; the residential areas had to be arranged around it, and to it the roads as arteries and veins of the plan had to come. The residential districts had necessarily to be in proximity to the factory area and the station, while the more remote parts, and particularly the north-west woodlands, were chosen for larger houses, with motor access to the Great North Road. It was not intended to segregate the working-class population, and the plan was so designed that properties of various sizes and values could be developed together.

The division of the town into two main parts by the railway running north to south presented a considerable problem. It enabled the station to be put in the centre of the town, which was an advantage, and it made possible the definition of the industrial area, which was placed on the north-east, where the branch line to Hertford ran through it, facilitating the construction of private sidings. But more than half of the residential area of the town had to be on the east of the railway, which meant a marked separation between the east and west of the town. Because, however, the isolation of the working population was not desired, and there was the intention to get away from the characteristics of housing estates, the company decided to place small groups of working-class houses on the west side, in Handside Lane, Guessens Road, and Applecroft Road. Of course, the demand for the good residential neighbourhood had also to be met, and the company could not fly too far in the face of it.

What was needed was the creation of neighbourhood units, but the company never really grappled with the problem, which was strange in view of the fact that four of the original directors lived in the place.

Thus the residential part of the east of the town became built up with a series of housing schemes, which had the merit of being designed by different architects, so that they were not on a single pattern; but variety in the appearance of this part of the town did nothing to bring about a mixture of classes, because, although the company did a great deal of building prior to the war, the good residential type of house was not built there at all.

Everything was against the company doing anything else, it is true. It did not possess the financial freedom to do what it would like to have done, and had to proceed under the whip of necessity. Had the necessary money been there, and had the full extent of

the land been available on the east that the company required for its scheme, more could have been attempted. Happily, however, the town as a whole was a mixed community. People in all parts collaborated in the social organizations, and in the town's life there is a very definite admixture of classes. No kind of prejudice asserts itself. There is at least a measure of common interest and a sense of sharing.

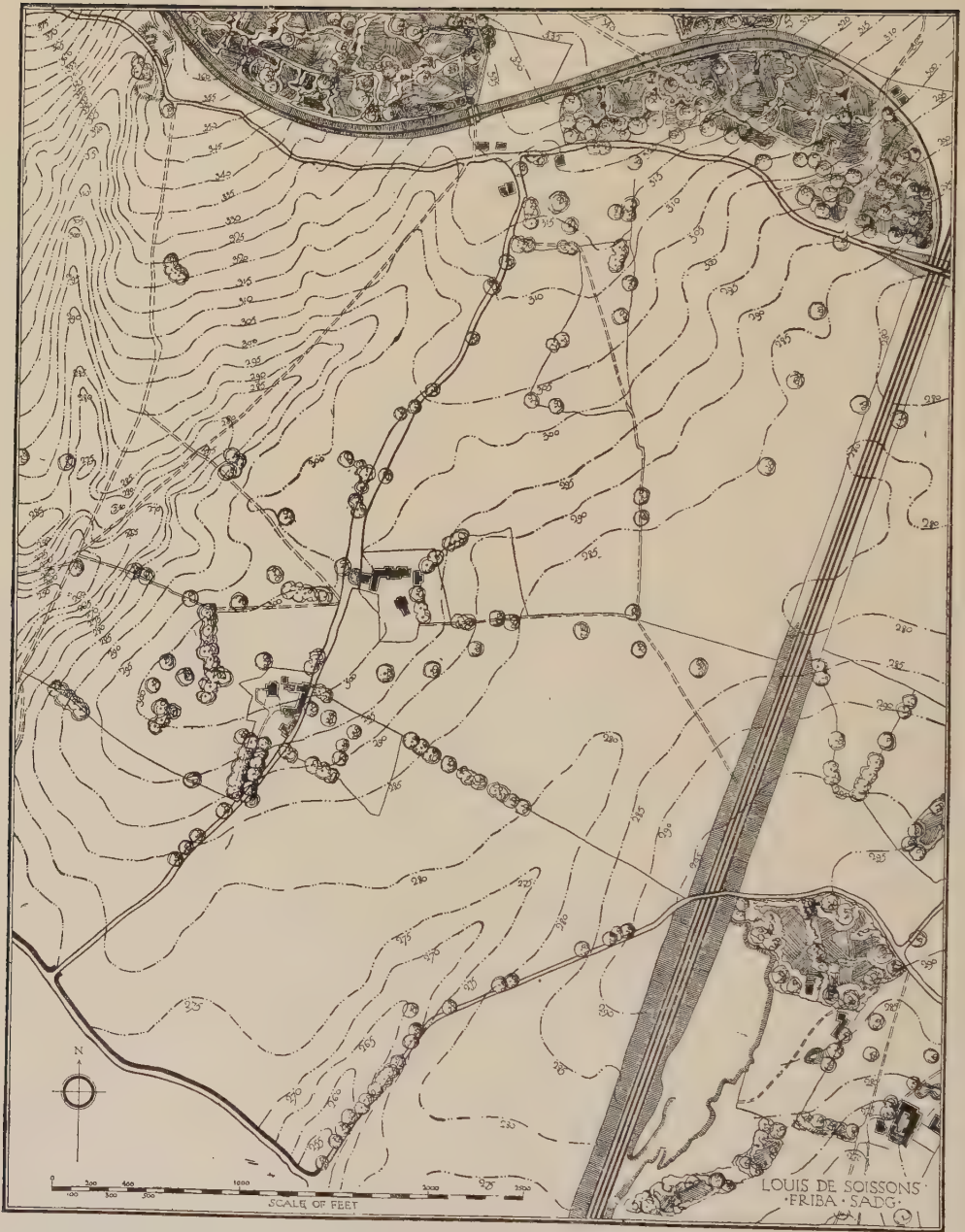
The town suffered grievously from the lack of community centres as we have said already. There was the Lawrence Hall, and the popular 'Cherry Tree,' and a hall on the east side for meetings and social gatherings, but these were not sufficient, though still not easy to maintain. Adequate club facilities were absent. Even when the urban district council built its community centre with a warden to look after it, a community spirit was not generated because not enough was done to prepare for it: in fact, not enough money was spent. There was goodwill, which, however, was not by itself sufficient. The social soil was not tilled because adequate means of husbandry were not available.

## § 5

As a main decorative and planning feature a Parkway was designed to run southward from the civic centre, through the centre of the town parallel with the railway for a distance of 1,300 yards. The line of Parkway was determined at its northern end by the point at which it was practicable to cross the branch railway line, and at its other end by the point where an existing road led to the Great North Road and London. The level land near the railway gave an opportunity for a secondary short boulevard (called Howardsgate) at right angles to the Parkway and leading to the site of the railway station. Parkway and Howardsgate were made of equal width, and were thought to allow sufficient space for parking of motor cars on a large scale.

Accessibility to London had to be provided for in the road-plan of the town, and the main highways were so planned that traffic could get easily and quickly in and out of the town. As motor transport for industrial purposes was already in 1920 greatly on the increase, special provision was made to enable such traffic to obtain easy access to the factory area without passing through the residential or business areas of the town. Provision had also to be made for road traffic to Hertford in the east and Luton in the west. But the carrying out of these roads were beyond the powers of the garden city company itself.

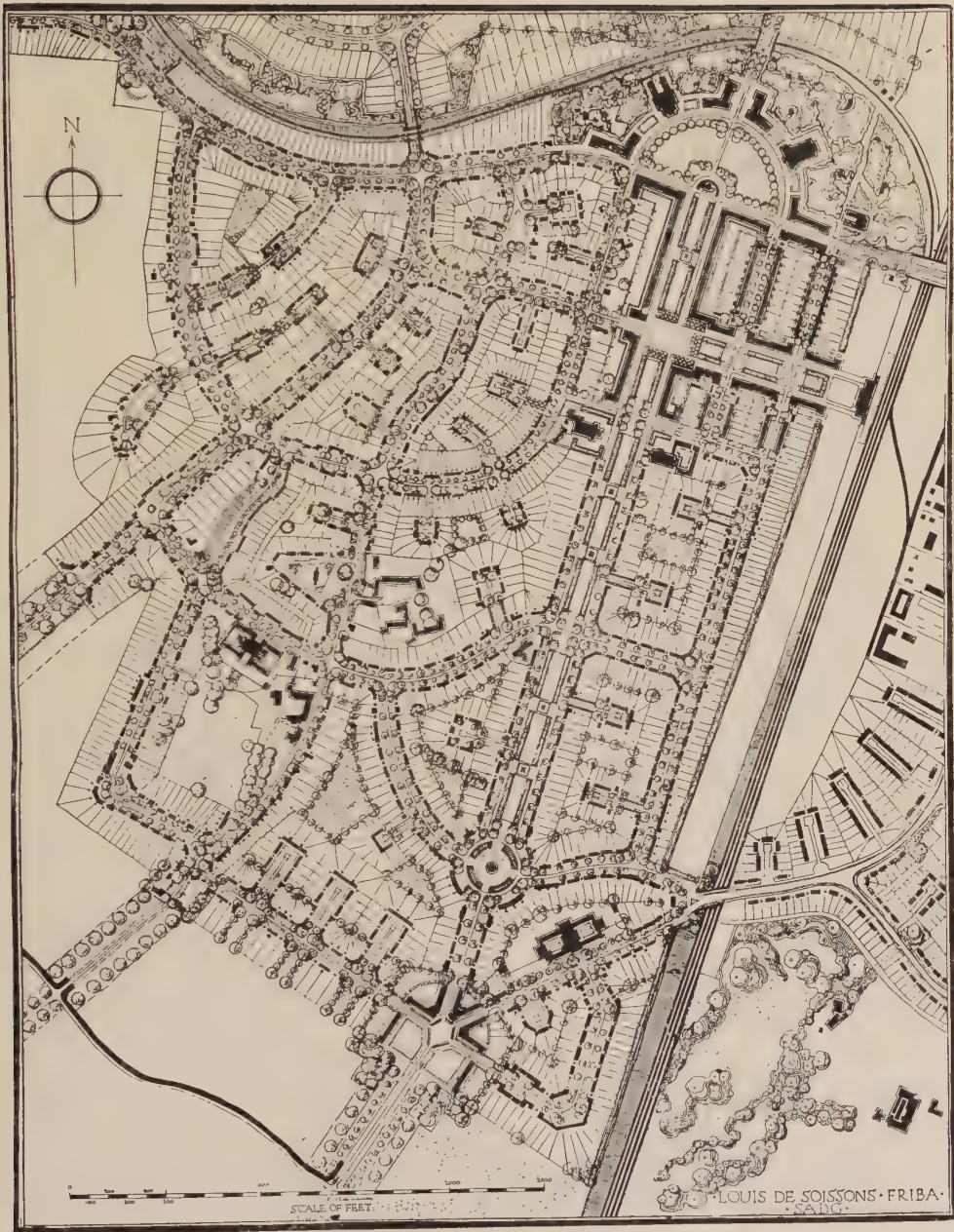
As the town is on the Great North Road, which has a heavy motor traffic, it was desirable so to arrange the roads in the town that they were not likely in the course of time to act as by-passes for through traffic. The plan therefore provides for the Great North Road by-passing the town. It is possible to enter the estate from the Great North Road at three points: at Hatfield from the Hertford road through Hatfield Hyde, which still requires the county roads south of the estate to be improved; through Stanborough by the lower part of Parkway, which leads to the town centre and alternatively to the industrial area; and by the Valley Road, which runs through the residential area.



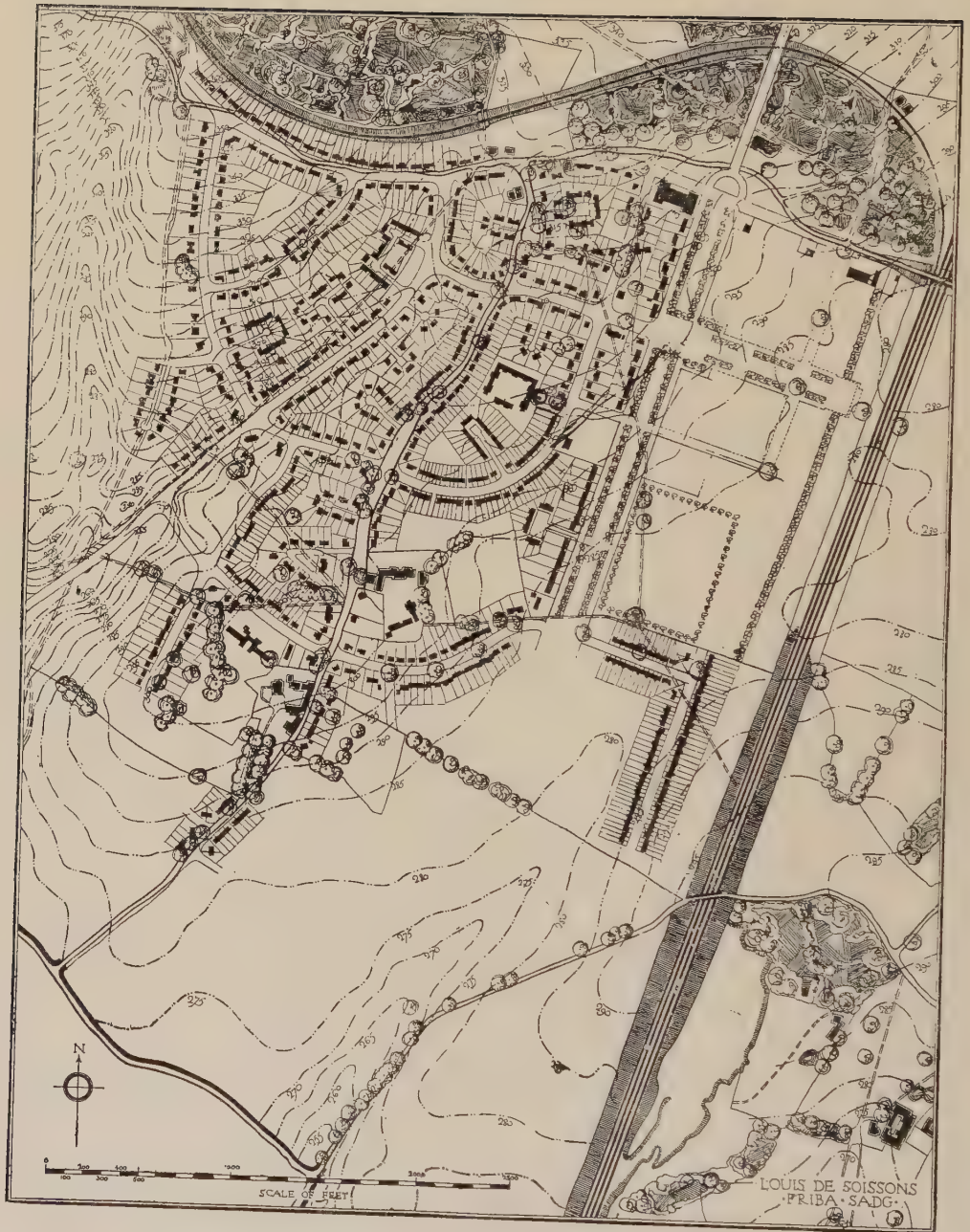
**SOUTH-WEST AREA: ORIGINAL NATURAL FEATURES, ROADS, RIGHTS OF WAY, AND CONTOURS**

This and the next three diagrams are interesting as showing the planning of a town section and its realization. The extent to which the architectural scheme has been carried out is noteworthy, and shows the value of organization in connection with development.





SOUTH-WEST AREA: SECTION OF THE TOWN-PLAN



SOUTH-WEST AREA: DEVELOPMENT CARRIED OUT TO 1924





SOUTH-WEST AREA: DEVELOPMENT CARRIED OUT TO 1949

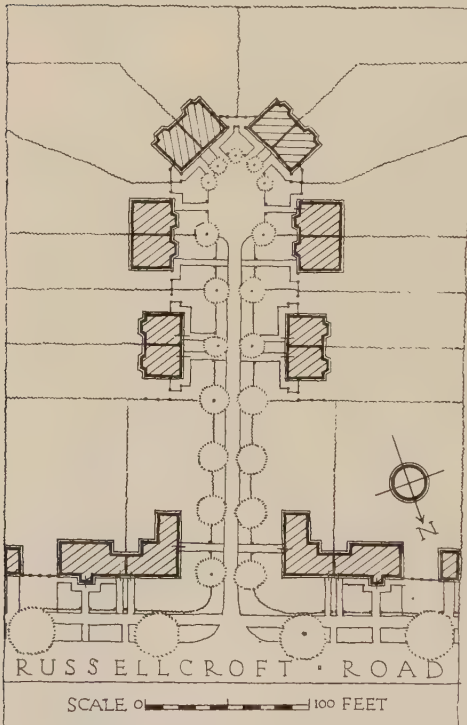
At the left-hand top corner there is shown part of a fruit farm and the southern part of the golf-course; on the left at the bottom is the secondary school. Development has still to be completed. The shortening of Parkway and the rather congested building on the south-east are notable changes from the plan. The town centre and the main shopping and business area are at the head of Parkway.



By each of these routes it will be possible to regain the Great North Road at a higher point; but the roads are so arranged, and indeed the contours of the northern part of the estate so required, that the access is not convenient for through traffic, the roads winding along the contours to avoid bad gradients.

## § 6

The short 'close' or 'cul-de-sac' is a feature of the town-plan. These roads can be



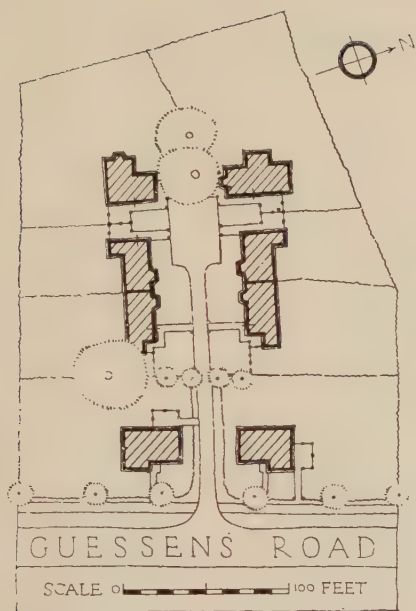
THE ORIGINAL TYPE OF CUL-DE-SAC

lightly constructed as they do not carry heavy traffic, and they enable land to be developed with a minimum of main road frontage and generally with economy in sewers. They also reduce the number of corner plots, which are always a difficulty in building development. Another advantage of the close is that it gives a certain privacy and quietness, appreciated by many people. Closes are of a number of different types. There is the normal type at right angles to the main road, about 200 feet long with a terminal turning point for vehicles, the houses placed on each side with a single house or a pair at the end. The houses may be placed near together in blocks of four or more, to get a real close effect, or they may be spread in open formation. In another type the close is on a slight curve; another has the shape of a T; another is rectangular. Only in one instance, so far, is a close also a thoroughfare for foot traffic in middle-class development; but it has been found desirable to provide footpaths through the closes in

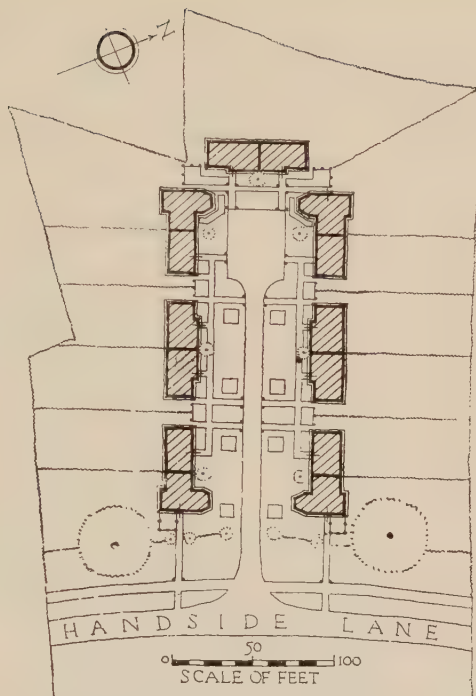
working-class areas. The close has been found very successful. Other types have since been developed. It will not carry too many houses, as it is important that it should not be allowed to take too much traffic; thirty houses is the maximum at Welwyn Garden City, and few have more than twelve. Another type of light road is rectangular, or two sides of a triangle, providing a through way for vehicles around a green.

## § 7

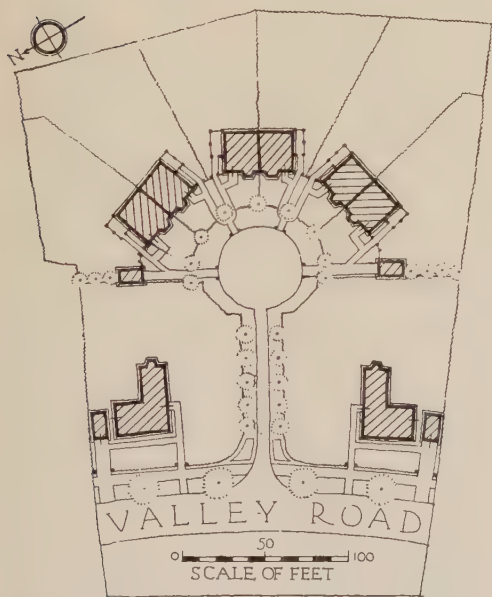
The railway main line is the most important traffic-way through the town, and the garden city company has kept in mind the desirability of making the town look well to



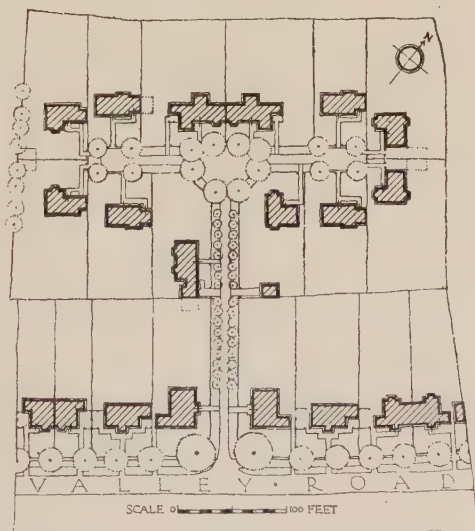
A SMALL CUL-DE-SAC WITH EXISTING TREES AS A TERMINAL FEATURE



CLOSED QUADRANGLE TREATMENT OF PAIRS OF HOUSES, WITH OPEN DEVELOPMENT IN FRONT

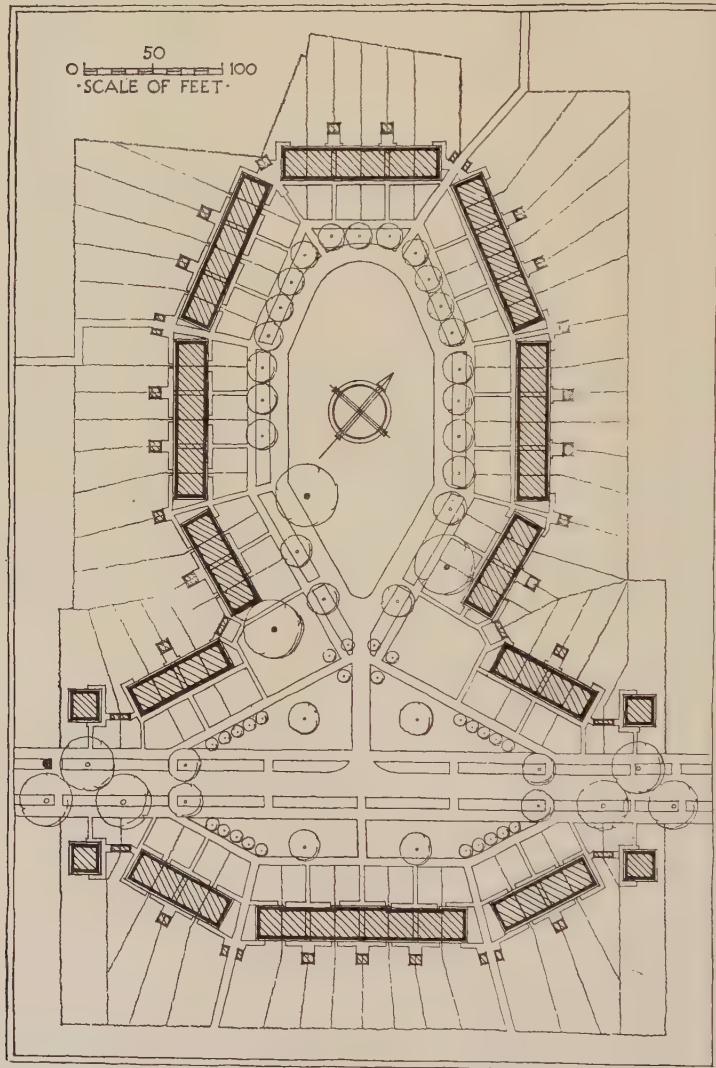


A SMALL CUL-DE-SAC WITH AN OPEN EFFECT



A T-SHAPED CUL-DE-SAC ON LAND HIGHER THAN THE ROAD IN WHICH A CERTAIN PICTURESQUE EFFECT IS AIMED AT

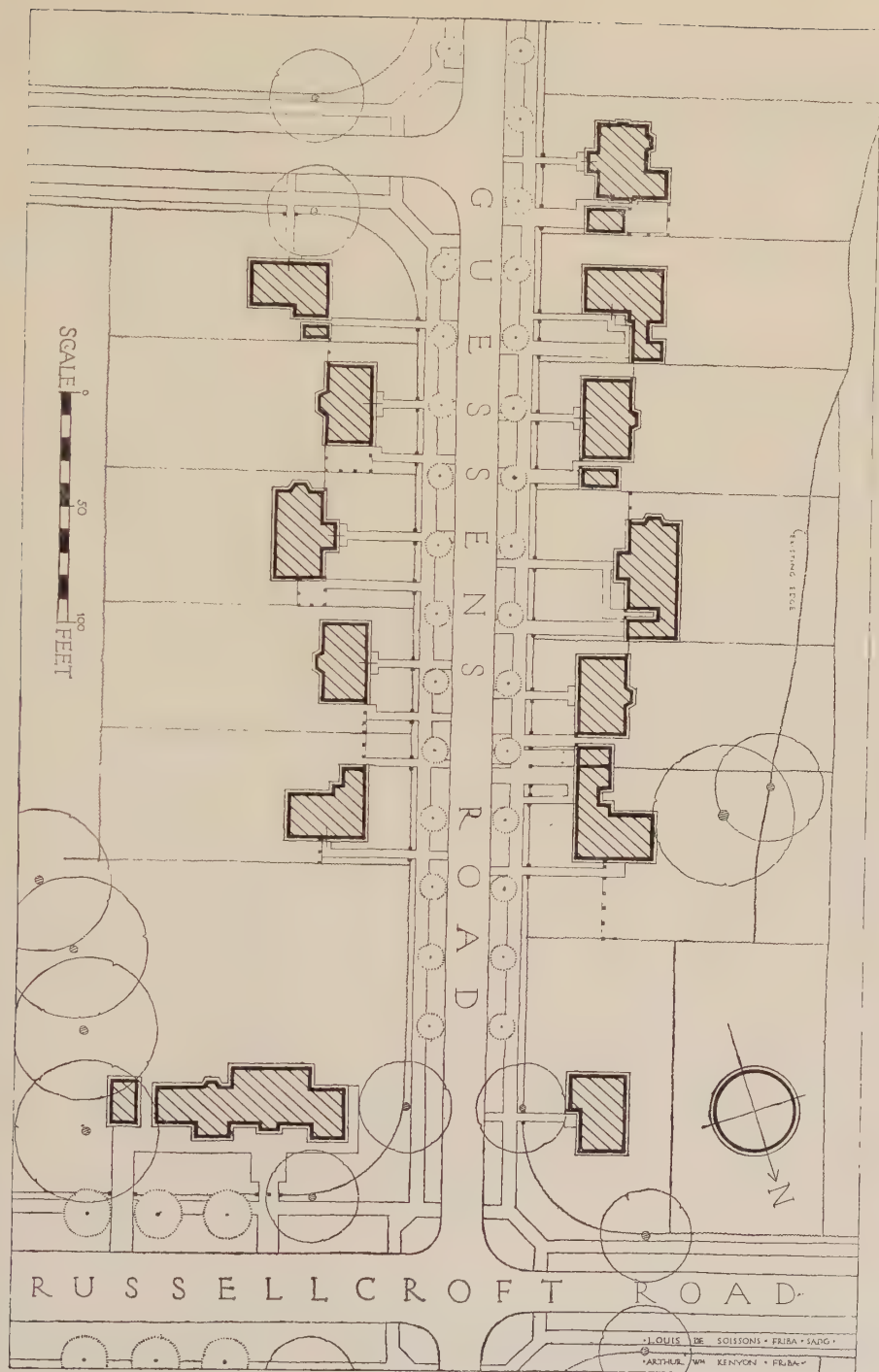
railway travellers. Usually the traveller gets the worst possible impression of towns as he passes through them in the train, and Welwyn Garden City has the opportunity to come before the notice of large numbers of people travelling to and from the north of England



LAY-OUT OF PART OF THE DISTRICT COUNCIL'S SCHEME IN SALISBURY ROAD  
SHOWING SHORTLANDS GREEN (1930). *Louis de Soissons, Architect*

and to show what a garden city looks like to people who may never see it in any other way. So some effort was made to avoid the untidiness, dirt, and meanness of the back-yard of the town that is so often thrust at the traveller. The ideal thing, no doubt, would be to lay out a strip of land between the railway and the buildings as a garden,





FORMAL GROUPING OF RESIDENTIAL DEVELOPMENT (1921)

and to make the buildings next to the line face it. And even though that would mean a road with only one building frontage, it would in many instances be worth while. At Welwyn Garden City, however, the great width of the railway land and the use to which it is put by the railway for marshalling yards, workshops, etc., make any such attempt



PICTURESQUE TREATMENT OF RESIDENTIAL DEVELOPMENT (1921)

ineffective. So that the garden city company has adopted the plan, to which reference has already been made, of planting a belt of trees thirty-five feet wide on both sides of the line. Houses will be too far away to be seen with much distinctness, but the larger commercial buildings and factories are so designed as to show a pleasing appearance to the railway. The advertising value of so doing is undoubtedly not inconsiderable.

## § 8

The provision of open spaces involves the selection of sites for (a) parks, (b) sports and recreation grounds, and (c) children's playgrounds. To treat these in order: Apart from their decorative value, parks can best be placed on the outskirts of such a town as a

garden city; for in a small town there is no real advantage in bringing them near the centre, as by so doing the benefits of concentration of buildings, which is one of the primary benefits of town life, are reduced. It is not economy to dilute the centre of a town with open spaces, which means greater distances to traverse to get to trains, shops, halls, theatres, etc., and a loss arising from unremunerative public services, such as roads, sewer mains, etc. But the centre of a town must have some park-like features, if only for amenities' sake and to serve as a promenade; and for that reason Parkway and Howardsgate have been laid out at Welwyn Garden City. These roads from some points of view are an extravagance; but they will provide the town in time to come with a beautiful park running through its centre, without interfering with the compactness of the business or civic areas. Parkway is two hundred feet wide, and the centre will be made into a series of gardens between two double rows of trees. Unfortunately the completion of Parkway was abandoned in 1929, the twin roadway being stopped at the junction with Barleycroft Road, which must be regarded as a major defect in the execution of the town-plan.

A feature is made throughout the town of the horticultural and arboricultural treatment of roads, groups of trees being planted to break lengths of houses, and masses of flowering shrubs or roses being planted wherever possible. The maintenance thus thrown upon the council is not light and the work could no doubt be better done, but the shrubs and roses make an admirable effect throughout the spring and summer.

The campus in the future civic centre has been partly constructed and is an attractive addition to the town's appearance and general amenities. It is already clear that more small parks are needed, and this will no doubt be given attention when development is in full activity again.

Large areas of the existing woodlands in the north-western part of the estate, including Digswell Park, were intended to be preserved. This was not fully shown in the original town-plan because of the need to provide for the maximum population on an area that did not allow for it, and it is true that the idea of building in Sherrard's Wood existed in

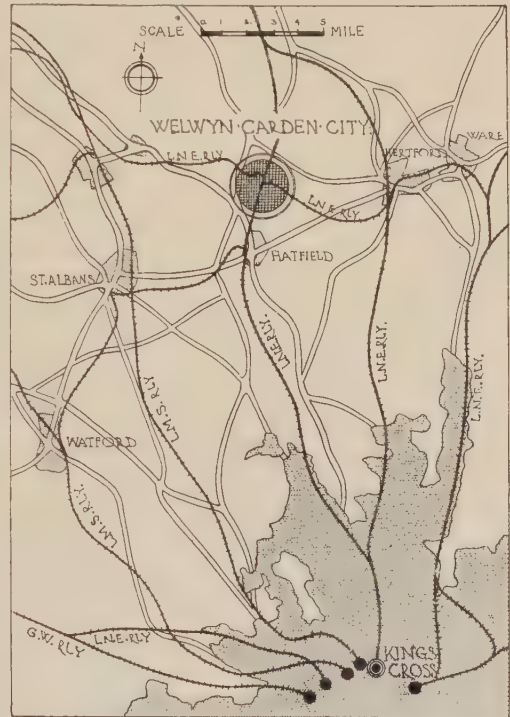
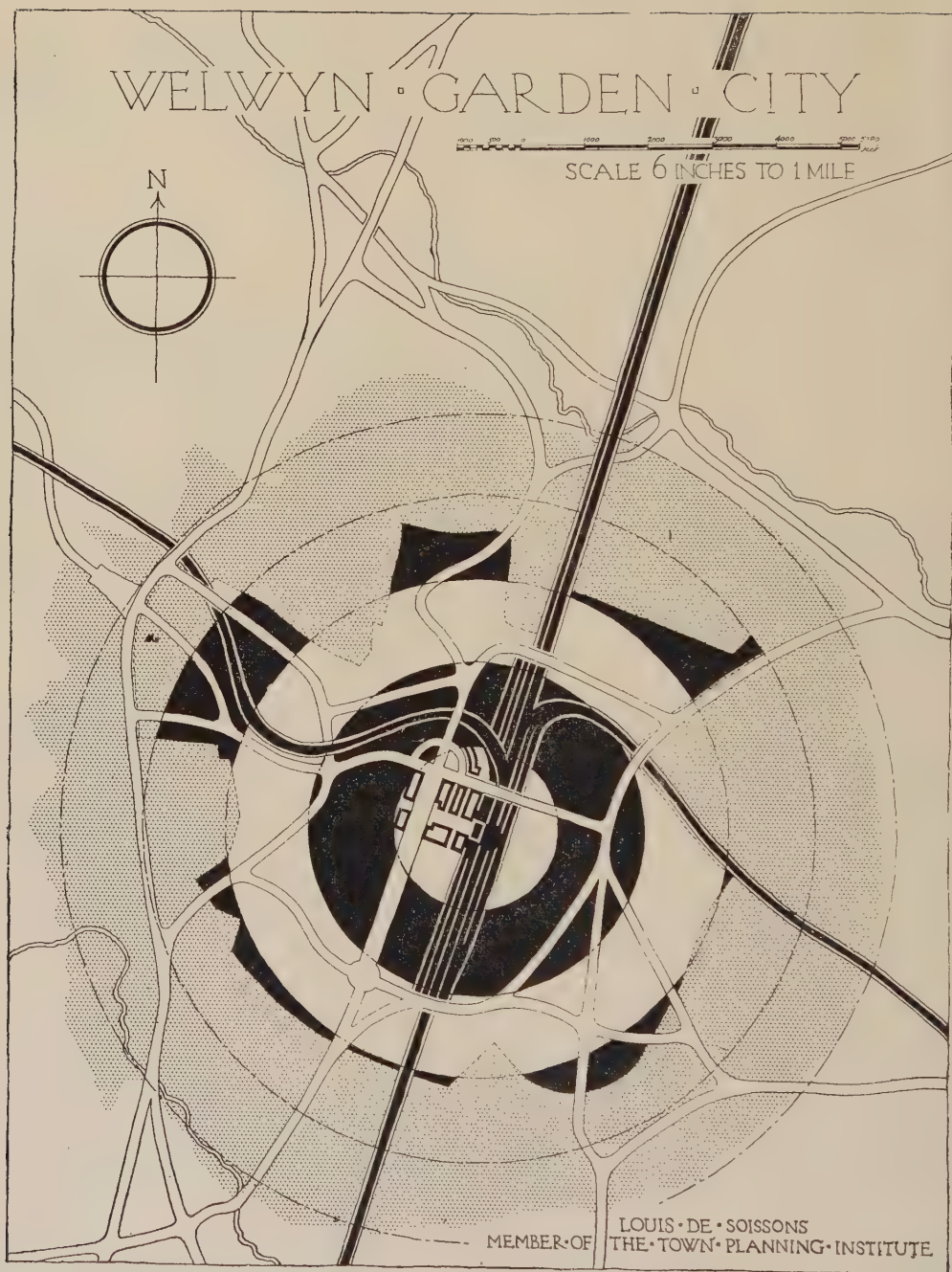


DIAGRAM SHOWING THE POSITION OF WELWYN GARDEN CITY IN RELATION TO LONDON AND TO ROAD AND RAIL COMMUNICATIONS





THE TOWN AREA IN QUARTER-MILE ZONES SHOWING DISTANCES TO OPEN COUNTRY

the minds of some members of the board at the start, though never publicly disclosed and not in fact adopted by the company until 1937, when a storm arose over the company's plans to build in woodlands that the residents had come to look upon as their cherished and almost only open space. The result was that the company's plans were modified, without the town being satisfied, though the district council accepted the company's proposals; but to what extent the projected development will take place remains to be seen. The fact that the area of the estate was always insufficient for the company's project is an aspect of the situation that must not be overlooked in any estimate of this matter. During the war, much of the timber in the woods was sacrificed by the orders of the Ministry of Supply.

As it was realized that in most towns recreational facilities are altogether inadequate, special attention was given to reserving sufficient sites for the purpose. Areas of land near the centre of the town that will ultimately be used for building purposes, but will not be required for many years, were laid out for tennis, football, cricket, etc., providing convenient temporary sites and utilizing land that would otherwise have been difficult to maintain in good condition. But permanent playing-fields should not be in the centre of the town if for no other reason than that playing-fields attract at times considerable traffic which it is not desirable to throw upon the town centre, which is bound to be always the most crowded part of the town. It was therefore intended to retain the best level land on the outskirts for the purpose. One reason for limiting the size of a town is to make possible the placing of playing-fields and recreation grounds on the periphery, while still leaving them within easy reach of all parts of the town. Small pieces of land behind plots are arranged for semi-private tennis courts, etc.

Children's playgrounds presented the difficulty of maintenance and supervision. The gardens of the larger houses are sufficient to allow children to play in them, but the gardens of working-class cottages are usually fully cultivated and cannot be used to any great extent for games. Small areas of from one to two or three acres were therefore laid out near the working-class houses for children's playgrounds, and quite small children are permitted to play on the greens in various parts of the town. The school playing-fields are also made available out of school hours. Children's playgrounds need more attention than has hitherto been devoted to them, to be equipped, to have a paved area and paths for riding tricycles, etc., and supervision to prevent their use by children beyond the age for which they are intended. Something of the kind was proposed in 1939 but the war stopped it and the matter has not been taken up again.

## § 9

The control of building under the plan is in the hands of the company's architect, and the constant study that the plan receives as development proceeds has proved to be a great advantage. Modifications were made as experience showed them to be necessary, and as until recently the plan had no statutory status, it could be modified by the

company as it thought fit. The company's method has been for each section of the plan to be examined carefully in detail in conjunction with the programme of development; the lay-out of each section, after being worked out first on a small scale and then, bit by bit, on a large scale, was the result of conferences in which the engineer (responsible for the roads, drainage, and water) and the surveyor (responsible for the disposal of the building land) took an active share; the final result being looked at from an economic as well as a simple town-planning point of view. Plans and elevations of all buildings are required under the company's leases to be submitted to the architect for approval, and building is subject to the building regulations of the company and the by-laws of the district council. A definite attempt was made from the start to control the architectural appearance of the town, and while this was not always easy, it was greatly facilitated by the company undertaking a large part of the building by means of its own subsidiary organization. High Oaks Road is an example of a road on which plots were taken individually, each house being designed separately to suit the requirements of the owner, and the result soon convinced the company and its architect (though he had designed a number of the houses himself) that a satisfactory street effect could not be obtained by that means. Therefore every endeavour has been made to carry out building in accordance with consistent schemes. Demands for individual building sites are met as fully as possible, but important sites are invariably subject to the architect's direct control. It is interesting to note that (excluding the workmen's housing schemes) more than two-thirds of the houses built to date have been erected by the company's building organization as part of definite schemes, and only 10 per cent have been erected as single houses by individuals; the remaining houses have formed parts of other building schemes. Whatever success has been attained in the development of the town may be attributed to that cause. Development has been kept as concentrated as possible, and the south-west area, being most accessible from the temporary station, was the first to be laid out for residential purposes and working-class houses. There was a demand for sites on other parts of the estate, especially in the north-west area, but the company refused to dispose of any land outside the area in process of development. The shape of the estate lent itself to such a policy, and the result is that a large section of the town has been practically completed. Though the essential idea is the adoption of a definite architectural scheme of building, its method of execution is a matter of choice, as it could just as well be done by putting the buildings out to tender or by the employment of a number of individual builders.

## § 10

As the town-plan was the company's, there being in fact when Welwyn Garden City was started no other means by which a plan could have been prepared, its execution has remained the company's responsibility in consultation with the local authority. Except for the comparable position of Letchworth, the facts were unique. Although from time to time after the first ten years, the question was raised as to the district council putting



into operation its town-planning powers, nothing was done except that in March 1931 the position was formalized as follows:

The company deposited with the council a plan showing the development at that date and its intentions at that date regarding future development. The plan showed existing and proposed roads and by means of colours the areas of land devoted or intended to be devoted to specific classes of buildings or reserved or intended to be reserved for private or public open spaces. The plan showed a large area of the company's estate not included in the plan and left white.

The company undertook:

(a) Before varying substantially the route of any proposed main roads to give not less than two months' notice to the council.

(b) Before making any change in the 'use' areas shown on the plan to give not less than two months' notice to the council.

(c) Before erecting any buildings (except farm buildings) on the area left white to give not less than two months' notice to the council.

The arrangement was personal to the company; it had no legal effect, and the company did not undertake to consider the council's objections. This arrangement continued until 1937, the company having succeeded until then in persuading the district council that town-planning action by the council was unnecessary. In 1937, however, the urban district council passed a resolution to prepare a scheme under the Town and Country Planning Act, 1932, and appointed Professor S. D. Adshead as town-planning adviser. The intention was to adopt the company's plan and to complete it as far as possible with such modifications as the council, with the help of its adviser, might consider suitable. The time had come for the council to play its part in planning, and although it technically was much weaker than the company, it had responsibilities as the public authority that could not be evaded. Of course, the position was not simple; for the company was not merely the landowner: the town was its creation, and the plan was not a mere abstract document but the company's rule of action, so that the plan, involving the aims and purposes of the company, had to be treated with respect. In fact, the position was not easy for either the company or the town. The council prepared a draft plan at the end of 1938, completing the company's plan, but departing from it in some important details, and controversy upon the matter was becoming acute until suspended by the war. The consideration of the town-plan was afterwards being taken up under entirely different conditions.

Then arose a situation that was highly complicated: the Abercrombie Greater London Plan, 1944, the activities of the joint town-planning committees, the formation in 1946 by the Minister of Town and Country Planning of the Advisory Committee for London Regional Planning, and the new Town and Country Planning Act, 1947, which made the county council the town-planning authority. There was also the fact that the garden city company had succeeded in acquiring further land to add to its original purchase. The first was 115 acres at Stanborough (1932), which had been sold to speculators at the original Panshanger auction, who for some years had been using it, or threatening to use it, to the detriment of the company. Then followed the Lockley's estate (1936) to the north (679 acres), the Danesbury estate (1945) also to the north (202

acres), further land in 1946 from Lord Salisbury ( $556\frac{1}{2}$  acres), an estate at Tewin Water ( $462\frac{3}{4}$  acres) in the same year, and a further small part of the Panshanger estate ( $202\frac{1}{2}$  acres) in 1947. Thus the area in the company's ownership, after deducting sales from the original purchase, was a total of 4,536 acres, to which there should be added land owned by the railway company (131 acres), the area of original county roads ( $37\frac{1}{2}$  acres), land held by the district council for sewerage disposal (47 acres), and land held by other freeholders ( $39\frac{1}{2}$  acres), which made a total of 4,791 acres for the garden city area as it stood in 1949.

These additional purchases were made because the company was in need of further land for its scheme as originally projected, but also to prevent land from coming into the hands of speculators for development that would have interfered with the company's objects. The plan of the town had always relation to the surrounding country. Indeed, never at any time did the company take any other view than that more land was required, and from the start it urged the same view upon the Ministry of Health, without, however, any result.

Originally, the site was selected after careful consideration of its position, and the company's plan was prepared with the characteristics and future potentialities, so far as could be estimated, of the area from Potters Bar to Hitchin, and from Hertford, St. Albans, and Luton, well in mind. After Welwyn Garden City was started, there were developments in the area that were by no means satisfactory, among them building at Mardley Hill, to the north, from 1921 onwards, the development of Brookman's Park to the south in the same year, the industrial development in the Hatfield neighbourhood starting with the de Havilland factory and aerodrome on the Barnet-Hatfield by-pass in 1933, which provoked some of the most unsatisfactory residential building speculation of the period, and generally the growth of Hatfield towards the garden city from the time the new town started. None of this development was good in itself or did anything but run counter to the aims of the promoters of the new town. These are the conclusions to be drawn from Sir Patrick Abercrombie's comments in his Greater London report; but such conclusions had long been obvious to all who saw what was happening, though there was no means to prevent or to remedy it. In particular, the bad siting of industry between Hatfield and Welwyn Garden City, apart from the de Havilland works itself, was inexcusable and an example of folly that would be hard to beat, when the existence of the industrial area of Welwyn Garden City not a couple of miles away is remembered. Sir Patrick devotes a section of his report to Hatfield and this area, and recommends that apart from de Havilland's the factories should be removed and no new industry allowed in Hatfield, the population of that town being allowed to extend from the present 9,000 to 22,000, and that apart from the old town two neighbourhood units should be formed there. These are sensible proposals. They were apparently accepted by the Advisory Committee for London Regional Planning, except that the committee proposed that the population be increased to 25,000, and the position with regard to industrial development was not made clear.

Of Brookman's Park to the south of Hatfield, which was started shortly after Welwyn Garden City was founded, Sir Patrick says 'that any growth whatsoever should have occurred here is to be most strongly deplored'; he proposes that further development should be rigidly controlled and strictly limited to a further population of 500. The joint planning committee, however, was prepared to let development go on for a further 5,500; but the advisory committee recommended that the increase should be limited to 2,000, which apparently is to be done.

Sir Patrick Abercrombie makes respectful acknowledgment of the achievements of Welwyn Garden City throughout his report, and his specific paragraph on the town is brief enough to be quoted in full:

The Welwyn-Hatfield-Welham Green area must be regarded as a single unit for study purposes. . . . Welwyn Garden City is the obvious centre for planned industrial expansion for the neighbourhood and no case on economic grounds can be made out for spotting it about in Hatfield and Welham Green. Welwyn's central area has the necessary spaciousness to make it the nucleus for a much bigger population and it possesses great possibilities for the reception of both population and industry from London (up to 23,000 persons). An appreciable extension of the industrial area eastwards along the Hertford branch line is proposed sufficient to carry a future population of 60,000 (Welwyn 40,000, Hatfield 20,000, though a number of Hatfield's residents will continue to find work at the aerodrome and in other nearby factories). Its industries are thriving and expanding and can easily turn over to peacetime production. This proposal includes the development of Lockley's Park with two community units. The very greatest care will be needed in fixing the boundary of the industrial and residential area on the east side of the main railway line towards Digswell Water. This is a magnificent valley and building should be kept back to the lines of the footpath running south-east from Digswell Park towards Black Fan. There are several villages on the fringe of the Garden City, such as Old Welwyn, Digswell, and Harmer Green, and the early fixing of a permanent and inviolable green belt is essential. There is no need to expatiate upon the planning of Welwyn Garden City and its architectural realization.

No fault can be found with this comment except that Sir Patrick did not appear to have considered the extension of the town to the east, and did not object to the company's proposal for the development of Lockley's Park to the north; he allowed the ultimate population to be 40,000. The joint planning committee was prepared to approve this development, accepting 42,500 as the total ultimate population of the town, but the advisory committee rejected all development to the north of the Welwyn-Hertford road, fixing the population at 36,500. The latter figure was approved by the minister in February 1947. 'This is not easy to justify in the light of Sir Patrick Abercrombie's remark when putting forward his proposals for populations of 60,000 for his proposed new towns that 'Recent research tends towards a somewhat larger unit than Howard proposed.' What Howard proposed for his model was 30,000, plus 2,000 in the agricultural belt. The original Welwyn promoters realized that 50,000 was a better figure and that the site was right for it.

The contention of the advisory committee, accepted by the minister, that Welwyn Garden City should not be allowed to extend beyond the river Mimram on the north, had the vigorous support of Welwyn Rural District Council, in whose area the development would have taken place. The council objected on the ground that the land should



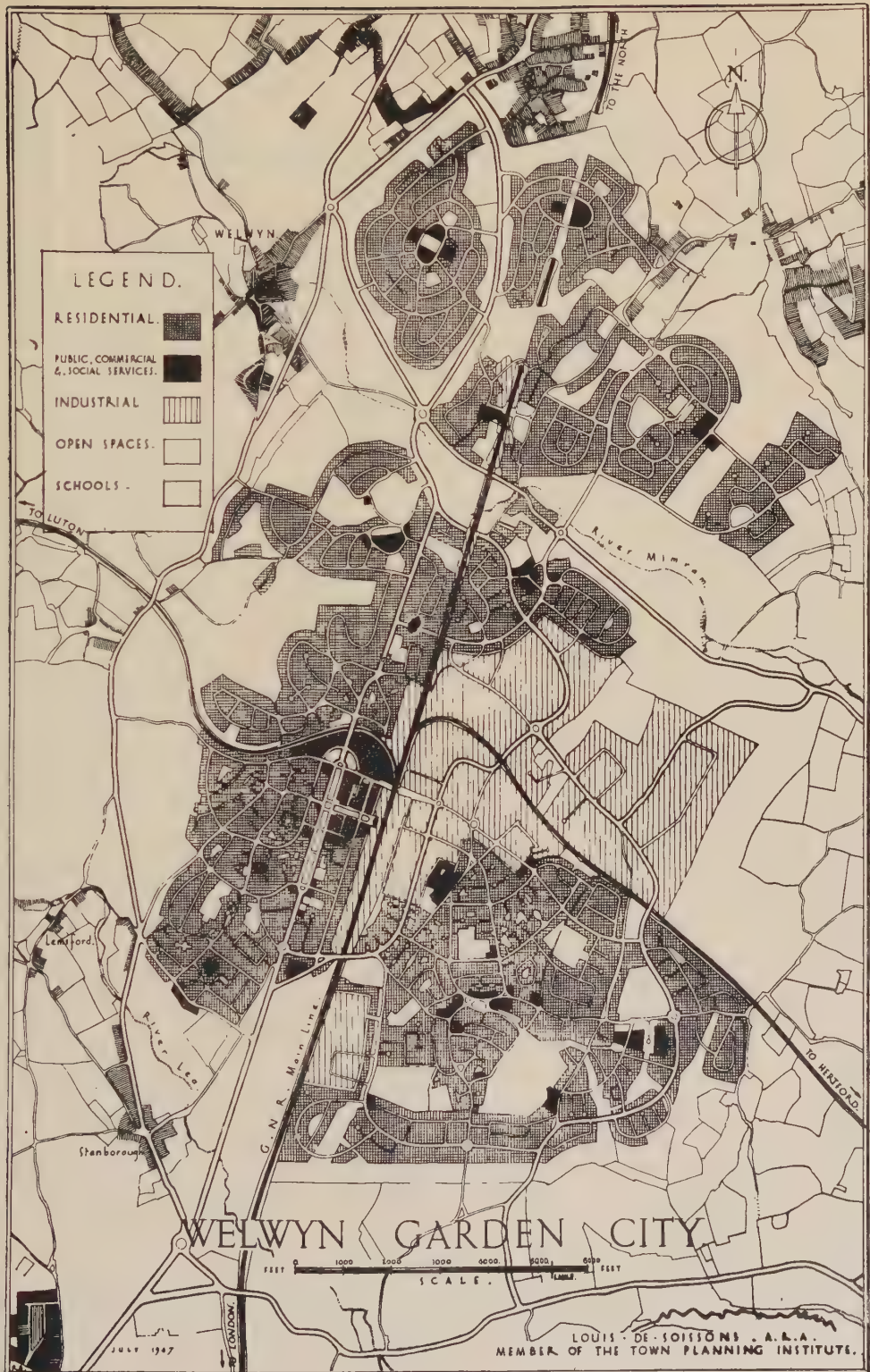
be kept free from building, in a newly possessed zeal for preserving amenities, but more specifically because it saw in this proposed extension of the garden city company's operations a step towards the absorption of itself in the garden city urban district. The defeat of the proposal should, therefore, be looked upon in its bearing upon maintaining the integrity of the rural district, which consists mainly of the old village of Welwyn.

## § 11

The completion of the town-plan by the company to provide for an ultimate population of 50,000 was carried out in 1947, but so far as the plan relates to the land north of the Mimram it must, having regard to the minister's decision, be regarded as dead, at least for the time being. As may be seen from the reduced reproduction on the opposite page, it is an admirable piece of work, a great advance upon the original town-plan, and there can be no dispute that excellent use was proposed to be made of the land acquired to the north and east. The principle of neighbourhood units was carried out with full appreciation of the sites to be developed and their relation to the town as a whole, and the lay-out of these areas was unquestionably some of the best work the architect had done. Of course, the plan was governed by the land actually in the company's possession. Ideal solutions to the problem of the town-plan were still not possible, and it will hardly be denied that had a free hand been allowed a different solution might have been aimed at. However, the plan deserves careful study; it is reproduced here as a record of the company's intentions and of the intelligent adaptation of means to ends. The modifications in the original plan should be compared with the new plan.

There is something to be said about the projected extension of the plan to the north, which has been objected to. In the present writer's opinion, the extension of Welwyn Garden City northwards is to be questioned as neither geographically nor from any other point of view desirable. The land north of the Mimram and in the valley of the Lee should be maintained as part of the town's green belt, and neither Welwyn nor Mardley Hill nor Woolmer Green, nor any of the land between Welwyn Garden City and Knebworth through which runs the Great North Road should be developed further. There is already too much development in these areas, and at least it is fortunate that some of the land did come into the garden city company's hands. That development in this area should cease is all the more important having regard to the establishment of the new town at Stevenage.

The proper extension of Welwyn Garden City is to the east on both sides of the branch railway line up to the boundary of Panshanger Park. Study of the map shows this to be the right direction, which is confirmed by study of the site. This was always known to the founders of the garden city, and, had the late Lord Desborough been disposed to discuss the matter with them, the general principles of the town's extension could have been settled years ago. But Lord Desborough would have no truck with the garden city: he hated it; he loathed the idea that it was his throwing open to auction of part of



LEGEND.

- RESIDENTIAL.
- PUBLIC, COMMERCIAL & SOCIAL SERVICES.
- INDUSTRIAL
- OPEN SPACES.
- SCHOOLS.

WELWYN GARDEN CITY

FEET 0 1000 2000 3000 4000 5000 6000 7000 8000  
SCALE.

LOUIS DE SOISSONS - A.R.A.  
MEMBER OF THE TOWN PLANNING INSTITUTE.

JULY 1927



the Panshanger estate that called it into existence. Had the garden city been a speculative development scheme, he would perhaps have had no such feeling; it was the fact that it was aimed at the elimination of speculation and that it stood for a new way of social living that caused this intelligent and not ill-natured man to be so bitterly antagonistic to it. He never once relented.

Neither, indeed, would Lord Desborough at a later date meet the urban district council when it wanted in 1938 to acquire eighty acres for a housing scheme, and he would not discuss with the council the future of his land adjacent to the urban district. The council thereupon decided to acquire compulsorily, under the powers given by section 35 of the Town and Country Planning Act, 1932, about 1,330 acres from Lord Desborough, and about 334 acres either compulsorily or by agreement from Lord Salisbury, a total of 1,664 acres, which, it was estimated, would allow for a further population of 22,750, bringing the total ultimate population of the town to 53,750. The proposal was regarded with at least tentative approval by the Ministry of Health, and the council was advised to proceed, preparing its scheme with care. The council proposed to use 560 acres of the area for housing purposes, 200 acres for the extension of the industrial area, and 904 acres for other residential purposes and as an agricultural belt. Unfortunately the scheme, which was prepared under the advice of the council's town-planning consultant, Professor S. D. Adshead, was not proceeded with. It was not viewed with any favour by the garden city company, which did not regard with satisfaction the prospect of the urban district council entering into competition with itself as an independent landowner. Had the war not intervened it is possible, however, that the scheme might none the less have gone forward; but attempts at compulsory purchase of land belonging to Lords Desborough and Salisbury might have been a ticklish business.

We can hardly underestimate the influence upon the conduct of the company's affairs from its inception, and thus upon the planning and growth of the town, of the fact that the area of the land that formed the town was insufficient for the full development of the scheme. The district council's project was intended to overcome the difficulty. It was always believed that some time and in some way it would be got over. Since Lord Desborough's death, however, the company found it possible to buy a small area of the Panshanger land, but not enough, though a personal undertaking was given by Lady Desborough that the company should have first refusal of any other land of hers to the east.

This brings us to the minister's decision that the population should be limited to 36,500, which defeats the announced intention from the inception of the scheme for a population of 50,000, and directly affects the town-plan. The political question of the size of the town is important, but here we are concerned only with the town-plan, and there can be no doubt that it cannot be left in its truncated state. Had the district council's scheme for extension to the east and the new plan that it had prepared for the town been carried out, the population provided for would have been 50,000 or more.



There can be little doubt that something on these lines will ultimately have to be carried out, for geography is in its favour.

The allocation of areas in the town-plan for a population of 50,000 was made by the company in 1947 as follows:

	<i>Acres</i>
Residential . . . . .	1,935
Civic and commercial centre . . . . .	65
Subsidiary commercial and shopping . . . . .	115
Industrial . . . . .	606
Railway . . . . .	131
Schools and playing fields . . . . .	250
Minor sports areas, spinneys, etc. . . . .	180
Sports grounds and rural area . . . . .	1,742
Sewage works . . . . .	47
<b>Total</b>	<b>5,071 acres</b>

This total area does not include the Danesbury area (202 acres), but does include 531 acres not in the company's hands. The total is still not large enough for an agricultural belt in any real sense. The particular areas were intended to be approximate and subject to revision.

The future of the plan was with the county council, until the decision to proceed under the New Towns Act, and was and still is dependent at least to some extent upon the general planning policy adopted for the Greater London Region. The direction that county policy is expected to take in its effect upon Welwyn Garden City may be seen in the decisions that have been taken. That the town-plan should be brought into the county system is undoubtedly a gain, and that it should fit into the regional plan is also an advantage. What remains to be discovered is the practical effect of these changes upon the development of the garden city; for the town-plan is not a mere plan: it is a plan that must have within it the means of execution, and in that sense it was different, when in the company's hands, from what is known as town-planning elsewhere, and will still remain different. It has always been true of the Welwyn Garden City plan that it did not live upon paper but had actuality. The planners were also the executants.

## § 12

The company's original policy with regard to street tree-planting was, while bearing in mind ultimate results, to give attention to immediate effect, so that many more trees were put in than would be necessary when they became fully grown, the idea being to take out alternate trees later on. This was done in Parkway, for example, where in 1947 the limes were thinned out with good results. The maintenance of the street trees passes into the hands of the local authority when the roads are taken over, and the authority has the duty of taking out branches and preserving the shapes of the trees, which means that it requires the services of a man who understands the proper treatment

of trees in roads, and should not leave the trees at the mercy of an engineer who knows nothing about them, or in the hands of those who think that all street trees must be lopped and their natural shapes destroyed.

The beauty of the Welwyn streets with their blossoming trees in April, May, and early June is one of the greatest pleasures that the town gives to those who live in it, and throughout the summer the streets retain a very pleasant aspect. One matter to which sufficient attention has not been given is the planting of trees in relation to the street lighting standards; the reason for this was that the trees were planted by the company, and afterwards the local authority erected the lighting standards, spacing them out on a plan in which the positions of the trees were ignored. This continued to be done for years with curious obstinacy, so that one often finds a lamp in the shade of a tree, causing the tree to be unnecessarily lopped and the lamp made inefficient.

The following is a list of the principal street trees planted in the town:

<i>Acer Negundo californicum</i> (Box Elder)	Palmerston Close; Mannicotts
<i>Acer platanoides</i> (Maple)	Russellcroft Road; Brockwood Lane
<i>Acer platanoides Schwedleri</i>	Bythe Mount
<i>Acer Pseudo-Platanus</i> (Sycamore)	Valley Road; Ravenfield Road; Knella Road
<i>Acer Pseudo-Platanus lutescens</i>	Walden Place
<i>Acer Pseudo-Platanus atropurpureum</i>	Valley Road; Springfields
<i>Aesculus carnea</i> (Red Horse Chestnut)	Guessens Road; Brockwood Lane
<i>Aesculus Hippocastanum</i> (White Horse Chestnut)	Parkway; Barleycroft Road
<i>Ailanthus glandulosa</i> (Tree of Heaven)	Palmerston Close
<i>Alnus glutinosa</i> (Alder)	Elmwood; Applecroft Road
<i>Betula verrucosa</i> (Silver Birch)	Ludwick Way; Digswell Road; Longcroft Lane; Barleycroft Green
<i>Carpinus Betulus</i> (Hornbeam)	Knella Road
<i>Carpinus Betulus pyramidalis</i>	Downfield
<i>Catalpa bignonioides</i> (Indian Bean)	Russellcroft Road
<i>Catalpa bignonioides aurea</i>	Homerfield
<i>Corylus maxima atropurpurea</i> (Hazel)	Polayn Garth
<i>Crataegus Crista-galli</i> (Thorn)	Valley Road; Attimore Road
<i>Crataegus oxyacantha flore pleno rosea</i>	Digswell Road; Gainswood
<i>Crataegus oxyacantha flore pleno coccinea</i> Wm. Paul	Guessens Road; Marsden Road
<i>Cupressus Allumii</i>	Attimore Road
<i>Fraxinus excelsior</i> (Ash)	Birdcroft Road
<i>Juglans regia</i> (Walnut)	Bridge Road
<i>Laburnum vulgare</i>	Little Youngs; Handside Lane; Digswell Road; Lytton Gardens
<i>Liquidambar styraciflua</i> (Sweet-gum Tree)	Russellcroft Road
<i>Pinus sylvestris</i> (Scotch Fir)	Valley Road; Woodhall Lane
<i>Platanus acerifolia</i> (Plane)	Guessens Road; Barleycroft Road; Longlands Road
<i>Populus nigra italica</i> (Lombardy Poplar)	Youngs Rise; Valley Road; Parkway; Broadwater Road
<i>Populus canescens pendula</i> (Weeping Grey Poplar)	Knella Road
<i>Prunus Amygdalus</i> (Almond)	Marsden Road; Applecroft Road; Fordwich Road
<i>Prunus Pissardii</i> (Purple-leaf Plum)	Digswell Road; Lanefield Walk; Handside Green; Knella Road

<i>Prunus Cerasus</i> (Dwarf Wild Cherry)	Applecroft Road
<i>Prunus Cerasus avium</i> (Gean)	Rooks Hill; Barnfield Road
<i>Prunus Cerasus Padus grandiflora</i> (Bird Cherry)	Fordwich Road; Heather Road
<i>Prunus Cerasus lannesiana grandiflora</i> (Ukon)	Stacklands Road
<i>Prunus Cerasus lannesiana erecta</i> (Amanogawa)	Parkway; Howardsgate
<i>Prunus Cerasus serrulata sekiyama</i> (Hisakura)	Pentley Park; Newfields; Broadfield Place
<i>Pyrus aucuparia</i> (Rowan)	Mannicotts; Fearnley Road; Barleycroft Green; Blakemere Road
<i>Pyrus baccata lutea</i> (Siberian Crab)	Melbourne Court
<i>Pyrus floribunda atrosanguinea</i>	Attimore Road
<i>Pyrus Eleyi</i>	The Campus

The following three are florists' varieties of the Crab:

<i>Pyrus Malus Dartmouth</i>	High Oaks Road
<i>Pyrus Malus John Downie</i>	Attimore Road; and Close, Springfields
<i>Pyrus Malus Lemoine</i>	Springfields
<i>Pyrus purpurea</i> (Flowering Crab)	Bridge Road; Lanefield Walk; Parkfields
<i>Pyrus Tschonoskii</i>	Little Youngs
<i>Pyrus Sorbus aria</i> (White Beam)	Town Centre; Valley Road; Dognell Green
<i>Pyrus Sorbus intermedia</i> (Swedish White Beam)	Parkway; Russellcroft Road
<i>Quercus palustris</i> (Spanish Oak)	High Oaks Road; Blakemere Road
<i>Robinia Pseudacacia</i> (Fragrant White-flowered Locust)	Valley Road
<i>Robinia Pseudacacia inermis</i> (Mop-headed Acacia)	Coneydale; Furzefield Road; Newfields; South Parkway
<i>Salix vitellina pendula</i> (Weeping Willow)	Handside Lane
<i>Salix viminalis</i> (Golden Willow)	Valley Road
<i>Tilia tomentosa</i> (Lime)	Youngs Rise
<i>Tilia europaea</i> (Common Lime)	Parkway; Upperfield Road

### § 13

The road names chosen for the town are as far as possible local names of fields, buildings, or persons. The system of street numbering adopted is to number the buildings in main radial roads from the centre of the town outwards, and secondary roads from their junction with main roads. When a cross road connects two main roads it is numbered from the road which is likely to be most used by the inhabitants of the cross road for access to the centre. Odd numbers are on the left of the road and even numbers on the right from the point where the numbering starts. Short culs-de-sac are numbered consecutively from left to right.



## CHAPTER III

### ITS SHOPS

Increases in population of a city are invariably reflected in business property values. . . . Nearly all real estate in a growing city has a consistent ratio of growth from year to year by reason of increasing population. . . . More fortunes, both large and small, have been made in centrally located land than in all other types of realty investment combined. S. L. McMICHAEL and R. F. BINGHAM, *City Growth and Values*

#### § 1

THE distribution of goods is one of the main functions of society, and to be markets has always been one of the primary objects of towns. And as goods are distributed through shops, the provision of shopping facilities is part of the business of all who attempt to build towns, and the choosing of areas for shops and the planning of sites for the purpose is one of the duties of town-planners. Hitherto shopping areas have grown up in towns in a more or less haphazard manner, subject to the same lack of order and design as the growth of the towns themselves. There is in all old towns some spot where a market is held and where men congregate for business; from such spots shops have straggled along main streets, following the course of traffic.

One may see this in every country town and in many parts of London. But in a garden city, which is a deliberately created entity, the shopping areas can be chosen in advance and deliberately placed where they are likely to be of the greatest service to the community. That the shops should serve the town well in their site, the accommodation provided by their buildings, their service, and in their working as a whole, is a major element in town economy; for a town suffers if its shops are poor, inefficient, badly placed, or unsatisfactory for any other reason.

#### § 2

That there was need to deal with shops in a different way from that which is usually followed in estate development was agreed by every one when Welwyn Garden City was started. Howard himself was active in the matter, and before anything was done about development or the board had considered the matter, he, entirely on his own responsibility, invited H. Gordon Selfridge to open a store in the new town, which Selfridge, of course, refused to consider. Then Howard immediately, and still on his own account, approached the St. Albans Co-operative Society but was even more promptly and flatly turned down. This was as well, for neither of these agencies could have done what was required or could have played the part in the company's scheme that shops were to play.

It will be noticed from the plan that the shopping area of Welwyn Garden City is placed adjacent to the railway station on both sides of the boulevard forming the main approach to the station, at right angles to the Parkway, and with a frontage on the east side of Parkway for a total distance of 300 yards. The area is bounded on the north by Bridge Road and adjoins the bridge leading to the industrial area and the east of the town, and two roads run through it parallel with Parkway. The area is just under twenty acres for shops, warehouses, offices, business premises of all kinds, garages, post office, police station, etc. There are subsidiary shopping centres in other parts of the town, but the attempt is made to concentrate shopping in the centre, the shops being built together with no other buildings to break their continuity. Apart from traffic to the passenger station and along Bridge Road there is no heavy road traffic in the area except to the shops themselves, and an endeavour will be made to keep all such traffic out of the main streets, special warehouse and unloading sections being provided.

The company decided at the start that no sites were to be let for indiscriminate shop or commercial building. All buildings were to be required to conform to a consistent scheme. The upper floors of the buildings were to be designed for use as showrooms, warehouses, offices, or as residential flats; but the ordinary small shop combined with a shopkeeper's residence was not to be built. The intention was to make a well planned and laid out shopping centre to meet the convenience of the public, and to provide first-rate accommodation for the storage, handling, and display of goods, the site being within walking distance of every part of the town and easily accessible from the surrounding country, with the railway station adjoining it. The development of the shopping area was deliberately retarded by the company until the town was large enough to maintain reasonably good shops, and the company met the needs of the first residents by setting up a shopping organization under its own control. The building for this business was placed on the outskirts of the future shopping area, but where it was most convenient for the residents. At the same time, on the same road, the Cherry Tree Restaurant, already mentioned, was established, and sites found for temporary estate and other offices, bank premises, garage, etc. The permanent railway station was not to be built for some years, and as the temporary station was on a different site, the first shopping and business facilities had also to be in temporary positions.

The methods adopted and still maintained for the development of the shopping facilities of the town are unusual, and deserve special attention.

### § 3

Instead of letting separate sites for shops to traders in the first few years, the garden city company handed over to an organization created by itself for the purpose, known as Welwyn Stores Ltd., the duty of providing the shopping facilities for the town. Welwyn Stores Ltd. was formed in May 1921, just a year after the town was started, and began business in the following October. It was a society registered under the Industrial and

Provident Societies Act, which is an Act passed with a view to giving groups of people (mainly working people) the benefits of incorporation and limited liability, and no one may hold more than £200 in share capital in such a society. The garden city company gave Welwyn Stores Ltd. the right to all shopping sites on the estate for a period of ten years, and in consideration of that right retained a controlling interest in the society; so that if the society should not be able to provide the shopping facilities required, or if the scheme should prove unsatisfactory in any other respect, the company would have been in a position to remedy it. The period of ten years was fixed to allow the scheme a fair trial and to give an opportunity for a review of the whole position at a definite date; if at the end of it the arrangement had worked well, the intention was to extend it; if, on the other hand, the experiment were not fully successful, or for any other reason, it would have been possible to modify it.

Welwyn Stores Ltd. raised its own capital, having issued in the first three years of its existence £14,000 in shares and £14,000 in loan stock, a total of £28,000. Practically the whole of this original capital was subscribed by persons non-resident on the estate—shareholders in the garden city company, those interested in the shopping scheme as an experiment, and those who considered the stores to be a good investment. Every encouragement was given to the inhabitants to become shareholders, and a few, but not many, took up shares or loan stock. The interest paid on the loan stock was at first 8 per cent, because it was a time of high interest rates, and 6 per cent on subsequent issues, which was payable similarly to debenture interest—that is, irrespective of profits. The dividend on the shares was limited to 7 per cent, payable out of profits. The balance of the profits, after payment of the fixed interest and dividend, was to be paid to the garden city company for the general benefit of the town.

#### § 4

In the first edition of this book the objects with which the Welwyn Stores was established and the arguments in support of them were fully set out; they are repeated substantially in the following paragraphs as they originally appeared.

The double object with which the garden city company established Welwyn Stores was to obtain the maximum efficiency in the distribution of commodities in the town and to secure for the community the land value created by the shops. These two objects were really interdependent; for the maximum land value depends upon maximum business, which depends upon maximum shopping efficiency.

Land value means the maximum price, or capitalized value of rent, that can be got for a particular piece of land, having regard to its utility. It is subject to the law of supply and demand. If there is much suitable land in the market and a small demand, the value will be low; if there is a little land and a small demand, the value will still be low; if there is little utilizable land and a great demand, the value will be high, will be limited, indeed, only by the financial advantage that can be gained from its use. In Welwyn



Garden City, where the whole of the land is in one ownership, the land available for shops can be as much or as little as the owner pleases. Its area is limited only by the ability or willingness of the owner to put the land into the market, and by the quantity of suitable land in a convenient position for shopping purposes. Very unlevel land, or land remote from a road or railway, or land in a situation to which the public do not care to go or can only go with difficulty, has practically no value for shops. At Welwyn Garden City the shopping area had good road and rail access, and was conveniently placed in relation to the present and future residential areas of the town. It was also in a situation that, it was thought, might possibly become a shopping centre for a much wider area than the town itself. The value of land in this position depends upon what people will give for it for the erection of shops. Obviously that depends upon possible shopping profits, and these in their turn upon population. When the town started in 1920 there was very little business to be done, therefore the land value was small; moreover, the prospects of future business were speculative, for the rate of increase of population was uncertain. Any one taking land for a shop at that date would not only have had to risk what he paid for the land (or the liability he committed himself to in the form of rent, which is the same thing), but the capital that he spent in buildings and stock. Consequently, any one taking a shop site in the early days would have paid comparatively little for it, and though he might have been induced to take a lease on an ascending scale of ground-rent, the anticipated future value must necessarily have been very limited, because the rate of growth of the population could not be guaranteed.

At the start of building such a town as Welwyn Garden City, shop sites are most likely to be taken by people of comparatively small means, neither able nor willing to pay a high land value, or to spend much upon their premises. Established firms, or people with capital, or the owners of multiple stores, have plenty of use for their capital, and are not inclined to go to a new town until there is a population large enough to make it worth their while; for trade follows population, it does not precede and anticipate it. Even if well-capitalized firms were induced to consider the erection of shops they would be disposed to make terms with the landowners that would tend to diminish their risks, which would mean the payment of something a good deal less than the future value of the sites. To overcome this difficulty it was suggested that sites might have been let on a revisable rent basis, allowing for any future increases in value to be settled at intervals of, say, ten years. But not only would there have been great difficulty at the end of each of those periods in arriving at what the increase actually was, but no business man would have erected buildings under a lease for land which left the amount of his future liability uncertain. Yet the increase in value of land for shops in a town such as Welwyn Garden City may undoubtedly become very great. No one can say how great; for it depends upon increase of population and the rate of that increase.

In every town, land for shops is the most valuable of all land. It is more valuable than land for any size of house or even for industrial purposes. The only limit of value that can be put upon it is the profit that can be derived from its use. That is to say

provided there are no alternative sites just as good, it is practically impossible to separate land value from the profits derived from trading upon that land. The profits of such trading depend upon the special adaptability of the site (which means that no two sites are exactly alike, which is a fact), the number and character of the population, and the energy, enterprise, and efficiency of the trader. Therefore the value of shop sites cannot easily, if at all, be analysed into site value pure and simple (that is to say, the financial advantage of the site itself), and trading profits pure and simple (that is to say, the financial result of skill in merchandising). Theoretically, the value of the site is the maximum that the trader can pay; and to discover what that figure is it would be necessary gradually to raise the price (or rent) until it stopped just short of the amount beyond which it would not pay the trader to carry on his business. But to do that is impracticable. Therefore the only way to get the full land value out of shop sites is to take the full profits that arise out of the use of them. That, in actual fact, is what was attempted at Welwyn Garden City.

## § 5

The experience of Letchworth, the first garden city, could be taken as typical of the ordinary method of letting shop sites in a new urban area. Between 1905 and 1914 about eighty leases were granted at Letchworth for rather more than that number of shops, etc., at fixed ground-rents which averaged a little over £3 per lease per annum, or at the rate of nearly £26 per acre per annum, in 1905, to just under £9 per lease per annum, or at the rate of nearly £90 per acre per annum, in 1914. The rents for new sites were increased gradually over the period, sites being let to any one willing to erect premises: there was no restriction. In the tenth year of the life of the town the total ground-rents arising from shop and commercial sites did not exceed £530 per annum. After the first war ground-rents were, of course, on a higher level. The values of the earlier leases have increased many times over; that increased value may be regarded as a reward for the enterprise of the early shopkeepers, which no one need grudge to them; but there can be no doubt that it represents a considerable loss of value to the garden city company, which cannot be regained within the period for which the leases were granted (99 years). The only way in which some part of it might be recovered would be to retain a large shopping area and to let sites for shops as long as people were prepared to take them, even though it might mean building too many shops; for the interest of the company in the early shopping leases is so small that it would be practically impossible to over-build to such an extent as to damage that interest. This means, in effect, that Letchworth would have a large shopping area, the majority of the sites being of comparatively low individual value (though the aggregate might be great), the shops being comparatively small and of low value. This is practically the same position as that which exists in ordinary towns. There is, however, this factor at Letchworth, of no immediate importance, but likely to play a large part in the future of the town, that all

shops are held on ninety-nine-year leases, which means that in the course of time the ground landlords, that is to say the garden city company—which will be in effect the town—will enjoy the reversion of the leases and secure whatever increased value can be obtained when it takes place.

## § 6

At Welwyn Garden City the entire land value was conserved by reason of the policy adopted. In the first place, the Welwyn Stores was able to pay a high ground-rent; and in the second place, the balance of its profits went to the Welwyn garden city company. This meant that a small area was used in the first instance—the area occupied by the original stores and its extensions being under one acre, compared with about four acres of shop sites let at Letchworth at the end of the first three years. It is an economy, of course, to use a minimum of land and to get the maximum value from it. And looking at the matter from the narrowest financial point of view, it was argued that if the stores could pay a ground-rent for its premises somewhere near the total ground-rents that might be expected from separate shop sites under the ordinary system, it would more than justify itself. The total ground-rent created by the stores alone at the end of the first four years of the town's existence was £281, to which must be added rents created by the restaurant, bank premises, office buildings, garage, etc., a further sum of £337. What the figure is now is not disclosed by the garden city company, but undoubtedly it is a large one. It may, therefore, be regarded as certain that the land values created by the Welwyn system compare favourably with the maximum values that might have been expected under the ordinary system; but of course the matter cannot really be judged from that narrow point of view. The important feature was that the system not merely created the maximum values on the areas actually disposed of, it conserved future values. And here it becomes necessary to discuss the future development of the system; but before doing so we must consider the other object with which it was established, for we have reached the point where the two objects merge into one.

## § 7

It was a major object in forming the stores to secure the maximum efficiency in the distribution of household and other supplies. The alternative to the centralization of shopping in one organization was to have individual shops under separate ownership and control. The butcher, the baker, the grocer, the draper, the hardware dealer, and the small sundries dealer would each have been established in his own premises, and perhaps in some trades there would have been more than one shop. The shops would have been small, because the town was small, and it would not have been prudent to sink too large a capital in premises; the stocks would also have been small, and the choice offered to the consumer would have been restricted. One has only to look at what happens in new districts around London and all the great towns to see what



we should have had at Welwyn. The first shops would have been little better than wooden sheds; or if permanent buildings had been put up they would have been narrow-fronted and shallow, with living-rooms over them. The shopkeeper would not have been able to look too far ahead; he would have been jealous of the opening of new shops in his own line of business, and we might have seen him exerting himself to get the number of traders restricted; and his prices—well, human nature being what it is, and business being business, they would no doubt have been the highest that he would have dared to charge. Incidentally, we may consider what happened in the same period in the large municipal housing schemes. Hardly any of these schemes were carried out with attention to the shopping needs of the community. Shops were allowed to spring up anyhow around the estates, and the unfortunate inhabitants have been in the hands of their proprietors, with the consequence that prices were often on the highest scale, and quality and service of the poorest. There is no need to elaborate these facts, for they could then and can still be seen by any one who cares to look for them. And when we remember that every one of these housing schemes represented a loss to the ratepayers as well as a much greater loss to the State, is it not folly that the largest financial values that have been created in and around them—the values created by shops—should have been entirely lost to the community?

Let us look again at Letchworth, where so much of the greatest significance can be learned on every aspect of town development, and inquire if the shopping system there was really satisfactory. The first shop buildings, with but few exceptions, were permanent, but they were the usual type of small shop and dwelling combined, difficult to extend and inconvenient to work. That the shops were better than in most new places is probably true; but that they were satisfactory is certainly far from being true. In spite of the competition of Baldock, two miles away on one side, and Hitchin, two and a half miles away on the other, the shops, the stocks, and the service were anything but good in the first eleven years; in the course of time there was, of course, a marked difference. Indeed, the shops at Letchworth are now, in the main, one of the town's best features, but still not on a really high level, and it is true that inferior shopping service was for many years put forward as one of the hindrances to the more rapid development of the town. The high prices charged in the shops were said to keep manufacturers from moving their factories and workpeople there, and the poor stocks and display were said to be bad for residential development.

## § 8

It has not even yet been computed what waste of money and effort is represented by the ordinary method of distribution of goods, all of which has to be paid for directly or indirectly by the consumer. Do we realize how many shops there are in the ordinary town? Since 1939 the number of shops throughout the country has if anything been reduced by enemy destruction and other causes, and few new shops have been opened,

though in some towns residential premises have been converted into shops. The average number of persons per shop in towns throughout the county in 1939 was about 54, varying from about 42 in Hertford to more than 100 in Letchworth. Housing estates were poorly served by shops, however, a survey undertaken on behalf of the Retailer's Advisory Committee on Town Planning during the war showing that the average number of people per shop on 37 such estates was 226. This committee would not commit itself to an opinion as to the number of shops to be considered desirable in a community of a given population, which was right, for shops vary so greatly in the facilities they provide, even in floor area, while proximity to other shopping districts is a factor to be considered, that no average figure is of any value. It is hardly to be disputed, however, that in general there are far too many ill-equipped, inadequate, and inefficient shops.

Does the present large number of shops lead to efficiency or economy? Especially when it is everywhere added to by numbers of ordinary dwelling-houses in which goods are exposed for sale in one of the front rooms (a common practice in the poorer districts of most towns), as well as by the activities of street traders and hawkers? Does it pay the community as consumers, or in any other way? Where is the economy in every forty or fifty persons (on the average) supporting a shop between them with its rent, rates, wages, costs of delivery, interest on premiums, and so forth? Long ago the Departmental Committee on Distribution and Prices of Agricultural Products, of which Lord Linlithgow was chairman, made in the course of its various reports a series of comments upon the methods of distribution of articles of food, which the committee considered to be unsatisfactory in many respects. In its final report, dated 1903, the committee said: 'The retailing of food from a large number of establishments is in any event an extravagant method of distribution.' And it pointed out that the excessive costs of small establishments 'render them powerless to provide the real and effective competition capable of reducing margins.' The position has not altered since then, except that the success of the great department stores, the multiple shops, and the co-operative movement is evidence of what can be done by proper organization and the establishment of a reasonable relation between turnover and overhead charges to reduce, at least somewhat, the general level of prices and to increase the efficiency of shopping and the profits derived from it.

Since the second war, owing to the reduced number of shops, the restriction upon building, and the restriction of supplies, practically all existing retailers have improved their position. Since the end of the war there has been nothing easier than profit-making in retail trade. Every one agrees that attention must be given to the matter in the public interest. Yet shopping is not a merely automatic affair, for personal choice and personal service enter into it in a decisive sense, for distribution is not merely an economic necessity, but shopping is also a social pleasure (or is a pleasure when queueing is unnecessary), and to attempt to rationalize shopping is a ticklish business. At Welwyn Garden City, however, the attempt was made, and what was done there will be further described.

## § 9

The Welwyn Stores was founded as a combination of retail businesses in a single organization, each business gaining something from its association with the others. Establishment charges, costs of delivery, costs of publicity, and the general expenses common to all businesses were pooled for the entire undertaking, with the consequence that economics were effected and better service was given than would have been possible under the system of small shops. The departments were: meat, groceries, provisions, cooked meats, etc., fish and poultry, vegetables, fruit, and flowers, confectionery, bakery, dairy, drugs, dispensing, tobacco, stationery, books and newspapers, music, gramophones, hardware, china and glass, cycles, toys, outfitting, drapery, millinery, costumes, children's clothes, haberdashery, boots, coal, and builders' merchants. Practically everything in daily use was to be obtained at or through the stores, and as the growth of the population warranted it the number of departments was increased. The business was on a cash basis, but weekly accounts were allowed. Goods were delivered throughout the estate, and from an early date in the surrounding area.

The scale of the undertaking depended upon the size of the population. When the business was started in 1921 the population was about 600. It is obvious that with so small a population there must be a great deal that the stores could not do. The extent of the service that it could give was largely governed by the stocks it could carry, its facilities for buying, its premises and equipment, and the staff it was able to employ.

The undertaking was conducted on a commercial basis—that is to say, it was run to pay. The lowest market prices were charged consistent with a reasonable average return upon the business done. It was not claimed that the stores had always the lowest price for every article; but it was confidently stated that, quality for quality, the general level of prices was that of the London stores (or under). The business was mainly that of a good middle-class trade with an increasing proportion of working-class trade, and one of the serious problems in the early years was how to meet these two demands; but that problem became simplified as the town grew and the increase of trade made it possible to extend the range of stocks carried. The function of the stores as the centre for the distribution of goods and services for the town was firmly kept in mind, and the obligation to give the maximum possible service, even beyond that of normal business, was respected. This could be done, and it was sound from a business point of view to do it, because the concern was on a permanent basis and longer views could be taken than would have been prudent in a business of a different character.

## § 10

It was suggested when the stores was started that the concentration of shopping business in one organization, and the absence of the normal competition among shopkeepers, would lead to a decline in efficiency. The fact was, however, that concentration



provided a focus for the expression of criticism, which, in the early years at any rate, produced an immediate effect. The whole undertaking was placed under the strong light of public opinion; any possible dissatisfaction with the service or with prices was directed upon it, and the organization was bound to be to a very high degree sensitive to the views of the public. Nothing but the most unremitting attention to efficiency could have maintained the smooth working of the system. The actual competition that existed was greater than in the ordinary town where, apart from the multiple shops, there is seldom any constant and effective competition among the traders; for at Welwyn Garden City even the competition of outside traders who travelled into the town for business was directed against the stores, and had to be of a certain strength to result in any business whatever for the outside trader. Indeed, as already noted on an earlier page, a weekly newspaper was founded ostensibly in the interests of outside traders by a critic of the company. As the town developed, competition would have been felt severely had the stores service fallen below a certain standard. The customers themselves did not hesitate to draw attention to deficiencies; but even if they had been silent the effect of their dissatisfaction would have been immediately apparent in the returns of the business. It would not, as a matter of fact, have paid the stores to take advantage of its theoretical position, and to charge the most it could get for its goods. The organization needed the goodwill of the inhabitants for its successful and easy working, and it was good policy for the stores to subordinate immediate advantages to the future of the undertaking. In practice, therefore, the inhabitants got a shopping service far in advance of what the town could have afforded under the normal system.

On several occasions the inhabitants were called together to discuss the working of the stores, when they had the opportunity of making suggestions and offering criticisms and when questions could be put to the stores management. Full advantage was taken of these meetings; there were frank exchanges of opinion, and information people wanted as customers was asked for and provided. Of course, there were faults to be pointed out and shortcomings to be drawn attention to; but in the main the meetings made abundantly clear that the residents were more than satisfied with the service they received. Some people could not see why the stores should not provide what they had been accustomed to in the shops of London and elsewhere, for it was not easy for every one to realize the limitations within which the stores had to operate. But these meetings allowed people to let off steam; and they provided evidence of contact between the organization and the town that was convincing and helpful to both residents and management.

A part of the stores organization to which attention deserves to be drawn is that it was the practice of the management to send a representative weekly to the surrounding towns of St. Albans, Hertford, and Luton to report upon prices and supplies in those towns. If it happened, as it did on some occasions, that the stores prices were higher for articles in current supply than were found in a neighbouring town, the stores prices were immediately reduced. The principle that was sought to be observed was to operate

the stores as though the shops of the neighbouring towns were on the spot. This meant constant vigilance; but the policy was carried out thoroughly.

One interesting feature of the system was that the stores' own weekly local newspaper was made available as an advertising medium for tradesmen in the surrounding towns, so that the stores, as part of its policy, gave full publicity to the competitive prices and to the service that could be obtained in the district.

### § 11

The Welwyn Stores was intended to be the main factor in the development of the permanent shopping area of the town. At the start the premises were designed not merely as a shop but as a social centre. At an early date a crèche was set up to enable mothers to bring their children with them when shopping, and to leave them in charge of a competent nurse. There were all the usual amenities of the modern department store, and at the same time some of the atmosphere of a club. The intention was, as opportunity arose, to extend the business to cover practically every shopping activity.

It was also intended, in addition to the businesses under the co-ordinated management of the stores, to provide premises for such personal businesses as hairdressing, millinery, dressmaking, tailoring, photography, and indeed for most things in which there is a predominant element of personal service. A start was made upon this at an early date, the first business being hairdressing, but after some years' experience, it was found advisable to improve the service and for the stores to make it one of its own departments. The original idea was that when the population warranted it, the individual shops should include the grocery and other trades. The object that was clearly had in mind was to achieve the highest efficiency in shopping service, and to give the town the widest range of choice that was practicable. It is undoubtedly true that a variety of goods and service is an inducement to larger total business, which, in turn, has an influence upon site values. How this worked out in practice will be referred to in a moment.

### § 12

Among the particular advantages of the system of shopping at Welwyn Garden City was that the makeshifts that have to be adopted in the early development of shopping facilities in a town need not become permanent. For example, the first shop premises at Welwyn Garden City were put up on the outskirts of the shopping area, because when the premises were built there was no access to the central part of the area; it would not have paid to provide that access, and even if it had been provided the position would not have been convenient. The first houses were built on roads that had access to the temporary railway station, which was at some little distance and on a different line of road from the site of the permanent station. The temporary stores was placed where the maximum traffic existed at the time; when the permanent station was built and roads

were made to it the centre of gravity of the town changed. It was then necessary to move the stores to the new centre, which was done. Thus the town was not saddled permanently with shops in the wrong position.

All this indicates that Welwyn Garden City was not under the influence of the vested interests of individual shopkeepers, which is, and always has been, one of the very greatest and most deeply rooted of all influences in towns throughout the world. The existence of a variety of vested interests, trading, commercial, professional, and so forth, that grow up in towns is an integrating element in the social structure, but paid for at a high social cost, for it makes changes a matter of extreme difficulty, because certain sections of those interests are always deeply committed to things as they are, and this has everywhere proved to be one of the most effective obstacles to town-planning improvements in the old towns. The vested interests of shopkeepers come, in the course of time, to represent an enormous amount in capital value, the effect of which neither town-planners nor any one else can ignore. At Welwyn Garden City these interests are not in a large number of hands, and were intended to be under a considerable measure of public control, so that a sectional advantage was not to overpower greater general advantages.

### § 13

The full benefit that the system of shops at Welwyn Garden City was to provide were seen most clearly in the early days of the town, because the shopping service was notably superior in its variety and efficiency to the shops that elsewhere exist in towns of similar size. The economic advantage to the town in avoiding altogether the high prices usual in new districts was considerable. Among other benefits were: (1) a unified milk supply was created, under which the duplication and waste of the ordinary method of milk distribution was avoided and the supply of milk was both clean and cheap; (2) bread was sold at the lowest price in the district, and the best material only was used in its making: a loaf of all-British flour was for a time sold below the price of ordinary bread; (3) the stores made it possible for good postal facilities to be provided for the town, which could not have been undertaken apart from the use of the stores organization and its premises; (4) a public hall was provided for the use of the town for dances, concerts, plays, meetings, etc.; (5) a weekly newspaper, the *Welwyn Garden City News*, was run as a means of communication among the inhabitants; (6) an information office was established to assist new residents when they first came to the town, and to answer inquiries made by the inhabitants.

That large improvements could be effected in the usual methods of retail distribution was what the promoters of the stores believed. They accepted what was said in the Linlithgow Report, to which reference has already been made, that, 'taken as a whole, distributive costs are a far heavier burden than society will permanently consent to bear'; also that 'Distributors as a whole must be prepared . . . to increase the effectiveness of their trades and to work steadily forward in the direction of devising less expensive



methods and of adapting their trading policies to the fundamental requirements of economical distribution.' That indeed was what was aimed at in Welwyn Garden City. In this report it was pointed out very clearly that a large part of the cost of distribution was due to consumers themselves, who demanded services from distributors, such as canvassing for orders, delivery of goods, credit, etc., which involved considerable labour and were highly expensive. So long as people want these personal services prices are bound to be high enough to cover them. At Welwyn Garden City these services had to be provided and paid for; but with a view to reducing prices the stores organization on two days a week was run as a market in which goods were sold at the lowest possible prices for cash, and no delivery was undertaken. This was to help those people who did not want the elaborate service of the main establishment to get their goods at a lower price by taking a little extra trouble themselves. Thus the stores as a distributing agency was expected to meet the requirements of every section of the population in the most efficient and economical way.

#### § 14

In the foregoing pages the objects aimed at in the Welwyn Garden City shops policy have been set out in their original form. After more than twenty-five years they are being maintained because they were found to be sound. There can be no doubt that the policy of keeping shops concentrated and of not permitting the establishment of small, inadequate, and wrongly sited businesses has justified itself. Control over shop sites is exercised by the company through its position as ground landlord and by means of restrictive clauses in its leases. Attempts made from time to time to evade the control, which meant that the covenant in the lease was broken, were successfully dealt with. Apart from other considerations, it was necessary for the company to deal promptly with such attempts, as had they been overlooked the covenant would have lost its binding effect, which would not have been in the interests of lessees generally. The first attempt to evade the control was made at an early date when a tenant of the district council started a newspaper business. He did not convert his cottage into a shop but advertised the fact that he was a newsagent and used the cottage for the distribution of newspapers delivered at customers' addresses. This man had been accepted by the newsagents' association and was authorized to receive supplies from wholesalers. When the Welwyn Stores applied for supplies of newspapers and periodicals a few weeks later it was at first refused! The man was allowed to continue his business from his home address on a temporary basis, but was not allowed to erect a sign or to alter the appearance of the premises, and later he was given the tenancy of a building in the commercial area: his business still exists. Taxi owners were allowed to use their addresses though they could put up no sign. There were no other businesses conducted from residences except those that required no signs or visits from customers or advertising and were entirely private affairs. Professional men were permitted to use their homes for professional purposes under licence and could erect an approved name-plate.

The object was to maintain the character of the district, as well as to prevent the dispersal of trading activities from the area allotted to them.

The land values thus created by the garden city company are the foundation of the economic stability and financial prosperity of the undertaking. Those values were the company's deliberate creation through imaginative foresight and by accepting, especially in the early years, some loss of revenue and heavy responsibilities. The policy was assailed with vigour; for it had many enemies, and every critic of the undertaking shook his head at the risks involved in what was being attempted. Disgruntled inhabitants attacked the scheme for what they thought they were losing, and official experts and government officials objected because of the immediate loss of revenue from the disposal of land. Even members of the board of the company were uneasy; for they realized the difficulty of the task, and they had to suffer the criticisms that the endeavour to carry it out brought upon them. However, the policy was persisted in because it was maintained with conviction and supported by evidence, while the alternative was not convincing. An investigation by the urban district council just before the war showed that total ratable values of commercial premises were larger in Welwyn Garden City than in other urban districts with comparable populations.

To-day the Welwyn Stores is the largest retail organization in Hertfordshire, with premises on a scale not be found outside the great cities. No town of its size in the country or even of ten times its size has a stores comparable with it. The existing building was opened in 1939. It is not only the largest building in the town and its chief architectural ornament, even in its unfinished state, and not only the centre of the town's social life, for everybody says 'Let us meet at the stores,' but it is a centre for the district. The stores is a place of resort as much as any of the great stores of London, and even more than they, because it is a recognized meeting place irrespective of business.

The first unit occupies a site of 2.9 acres, of which 2 acres are occupied by buildings. Some of these are in the nature of temporary structures. The total floor area is 155,000 square feet, of which 92,000 square feet are selling space, 17,000 square feet basement storage, 35,000 square feet service quarters, staff rooms, etc., and 11,000 square feet offices (including the garden city company's own offices). The building also includes a social club, a masonic suite, and sixty-two service flats.

The industrial and provident society responsible for establishing the stores was converted into a joint stock company in 1929 and the outside shareholders were mostly paid off, the interest in the undertaking being directly retained by the garden city company. At the moment of writing, the issued capital of the stores company is £148,608, to which must be added a bank overdraft of £225,000 and a loan from the parent company of £200,000, a total capital of £573,608. The company estimated that when the enterprise was fully developed a total of one and a half to two million pounds would be employed.

The trading results of this unusual undertaking are worth glancing at. When the stores was first opened, in October 1921, the sales for the week were £208, the total

population being under 600; at Christmas that year the takings reached £600. The first complete year showed sales totalling £23,397 (excluding building materials), and by 1927 the figures had reached £180,000. These were mostly, of course, food sales. The last year in the original building and its extensions in 1939, just before the war, showed a total of £344,462. The figures for the past five years have been:

	£
1944 . . .	645,762
1945 . . .	748,879
1946 . . .	802,014
1947 . . .	1,010,554
1948 . . .	1,191,173

On the above large total of sales, the trading profit shown by the 1948 accounts was £39,863 (£40,885 in 1947), out of which Welwyn Garden City Ltd. was paid £10,000 for administration (the same in 1947), and, after meeting audit fee, interest, staff schemes, and depreciation, there was an available balance of £15,978 (£24,287 in 1947); so that after making provision for taxation and paying £3,517 on the 6 per cent. preference shares, Welwyn Garden City Ltd. received £11,250 on its 2s. ordinary shares (£17,000 in 1947) and there was a balance of £197 carried forward (£1,420 in 1947). The results were not so good as in the two previous years, but they were none the less very good indeed.

### § 15

The first stores building was a temporary structure, twice extended. It had been intended to place the permanent building on a site at the south corner of Howardsgate and Parkway, but this was changed to the present site on Bridge Road. The building had been projected to include a large arcade for independent shops, but this was not carried out. Instead, Howardsgate has been developed as an area for such shops. This was a good idea; but the scale of the Howardsgate shop buildings has not been maintained, as can be judged from the two bank buildings at the north and south corners of Parkway. Much smaller buildings were allowed than was intended, which has not improved the architectural values of this central highway. The shops, though small, are well planned, with rear access for goods. Consistent treatment of the shop fronts and signs gives dignity to the road, banishing the vulgar individualism of the normal shopping street, something to be sought for in vain even in the best planned towns elsewhere. Here we see indicated the great benefits of shop building and control being in one hand. All were built by a subsidiary company, and let on lease. The upper floors are occupied as offices or service flats. Among the other shops is the post office, built by the department, a pleasant building, but out of scale with the other buildings, which should not have been allowed. Adjoining premises were built and occupied by the gas company, a building even more out of keeping with the style set for the road, and it is difficult to understand why the gas company was not induced to provide a more satisfactory building for its site. This building is also not displeasing in



itself, only by reason of its siting is it objectionable. It is true that the gas company's building adjoins a row of single-storey shops, built in a moment of economic panic; but these shops are intended to be completed at some time by building over them.

Adjoining the railway station a shop combined with a factory has been built by Cresta Silks. Although this repeats what happened at Letchworth, when a factory devoted to the production of ladies' corsets was put near the railway station, because its proprietors would not go into the industrial area, the wisdom of allowing an industrial building in the shopping area at Welwyn Garden City is to be questioned. The building itself is good; what is to be doubted is the rightness of the traffic of workers and goods to and from it in such an area. No doubt this particular building could be justified by the nature of its trade, but were the practice to be followed of bringing factories wanting a direct outlet for their products into the shopping area, the character of the area for its specific purpose would suffer and planning values would be confused.

### § 16

Small workshops are a different matter. Provision for these ought to be made in or near the shopping area, where no more, say, than half a dozen people are employed in any one workshop, and where the service is for the consumer. Such workshops should be allowed to sell their own products on the premises, but nothing else. They should be built by the company and let on lease.

### § 17

The question of a market has been raised from time to time. The district council was half-heartedly discussing the matter the year before the war, with some idea of building, and a plan was being prepared. But the garden city company was against the proposal, thinking it would prejudice its letting of shops, and the local shopkeepers were against it too, including the co-operative stores, thinking it would take business from them, which accounted for the coldness of the Labour members of the council towards the scheme, so that there was small chance of progress with it. Yet the opposition was, in the opinion of the present writer, short-sighted, for a well-laid-out modern market by increasing the means of distribution in the town would have induced the inhabitants to spend more of their money there and would have attracted people to the town from outside. It is true that a new market is hard to establish; but the very fact that at Welwyn Garden City the shopping area was concentrated would have helped towards its success, and the organization of a market in a well-designed building with facilities for stall holders and the public that do not exist elsewhere would have been an added attraction. However, the war put an end to the scheme, and, at the same time, indicated what good service it might have rendered the town had it existed. The great benefit of a market is that it provides an outlet for what people can grow or make and wish to sell. It adds to the incomes of producers, if only in a small way, but definitely, and it adds to

the interests of consumers by extending their choice of goods. Moreover, and above all, it puts distribution on the lowest basis of cost. Market selling is selling with the smallest overheads, which cannot fail to have an influence upon prices. No one can deny that there has been a need in Welwyn for lower prices than have been current in recent years for nearly all goods. Of course, high prices have become the rule everywhere; but, without alternatives open to consumers, sellers are tempted to take the line of least resistance and to put their prices as high as they dare. A market provides at least a possible means of ascertaining the bedrock price.

### § 18

The question may be asked, Did the stores in its special position meet the needs of the town during the war and does it meet them now when rationing continues in operation and supplies of goods are restricted? Without hesitation the answer can be given that it did and still does so, but not with any special distinction. There were no benefits accruing to the town during the period of difficulty from the concentration of buying power possessed by the stores. On the contrary, there was some loss. Under normal circumstances what one shop lacked another has been sometimes able to supply; but at Welwyn if the one shop did not have it, the public had to go without, unless people travelled to the neighbouring towns in search for it, as they did in large numbers. There is no suggestion by the present writer that shopping elsewhere with the aid of numerous shopkeepers was on the whole better than it was (and is) at Welwyn Garden City, although there was some advantage to be got here and there from numerous though small stocks, individual enterprise, or good luck; but the statement is made that there was no perceptible benefit to the town from the new kind of organization the stores had created. There was, in short, no sign of exceptional enterprise, but rather an acceptance of the position and reliance upon natural developments.

The population was inflated abnormally during the war and the town was overcrowded, so that there was much money about, and strain was no doubt placed upon the store's resources. The fact that the allocation of supplies was on the 1938 basis was the severest handicap, which it was found practically impossible to overcome; none the less large profits were made. These profits have continued to be made. There can be little doubt that the easy profits of the war period and the present time have an ill effect on all retail trading. They engender a false sense of prosperity and do not encourage efficiency. This is not said with any special references to the Welwyn Stores, for it exists throughout the country, as all students of retailing are aware. Too easy money-making conditions still seem to exist in retailing, realized margins are too high, and the profits made are by no means the reward of efficiency. All that is said here in relation to the Welwyn Stores is that in the present situation the future of the stores can hardly be forecast; perhaps it depends upon whether its management will lay hold upon the opportunities that the established position of the undertaking makes available.

## § 19

Apart from the stores the shops, banking, and commercial business in the central shopping area of the town are as follows:

Bakery . . . . .	1	Greengrocer . . . . .	1
Banks . . . . .	3	Grocery and provisions . . . . .	1
Building society . . . . .	1	Hairdresser . . . . .	1
Butcher . . . . .	1	House agent . . . . .	1
Café . . . . .	1	Ironmonger . . . . .	1
Chemist . . . . .	1	Music and radio . . . . .	1
Confectioners . . . . .	2	Newsagents . . . . .	2
Cycle agent . . . . .	1	Outfitter . . . . .	1
Dry cleaners . . . . .	2	Shoemakers and repairers . . . . .	2
Fancy goods . . . . .	1	Snack bar . . . . .	1
Furnishers . . . . .	2	Surgical instruments . . . . .	1

A branch of the local co-operative society with bakery, butchery, grocery, and provision departments is included in the above figures; the society also delivers milk. Some of the shops have more than one business, as for instance the confectioners are also tobacconists, and the branch of W. H. Smith & Son is also bookseller and stationer. There are offices occupied by solicitors, accountants, architects, and others.

The shops are let by a subsidiary company on leases that provide for rentals based on population, and the leases have restrictive clauses preventing other trades than those specified in the leases from being introduced. It is probably an accident, though not without significance, that the local directory prepared under the company's control does not contain a commercial section.

## § 20

There are sub-shopping areas at Handside, where there is only a branch stores, at Peartree, where there are a branch stores and an independently owned fried fish bar, at Salisbury Road, where there is a branch stores, and at Woodhall where there are a branch stores and four separate shops (boot repairer, confectioner and tobacconist, chemist, and cleaners). The branch stores have the character of village general stores, with food departments and sundries of various kinds.

## § 21

Altogether, the shopping experiment at Welwyn Garden City is one of the most valuable that has been made in the country and offers lessons that deserve to be studied. The establishment of the stores was said to be an interference with freedom: why, it was urged, should not a man if he wishes to do so open a shop, however poor in equipment and however incompetent he may be? Let the natural process of competition decide his fate; but let him be free to choose. The question has, however, only to be put for it



to be seen that one answer only is possible. What interference with freedom there was in preventing such shops to be opened was in the interests of the freedom to provide people with the best practicable service. In society men agree to be bound, or there is no social order. The test is for what purpose they are bound, and how the bonds are tied. The interference with freedom at Welwyn was no more than was necessary in the immediate and ultimate interests of the town that was being created. As an artificial creation, the community, or those who acted on its behalf, could not be dependent upon natural processes; its own chosen process had to be operated. It was necessary that the interference with freedom should appear as slight as possible, and that in fact took place. The achievements to date, though falling short of what was first aimed at, are none the less substantial; what remains to be accomplished may be perhaps the most important of all.

## CHAPTER IV

### ITS INDUSTRIES

There is therefore no better use for public and private money than in . . . helping those of the working classes who are willing to leave the large towns to do so, and to take their industries with them; while money spent on reducing the cost of living in large towns by building workmen's houses at a loss or in other ways is likely to do almost as much harm as good, and sometimes even more.

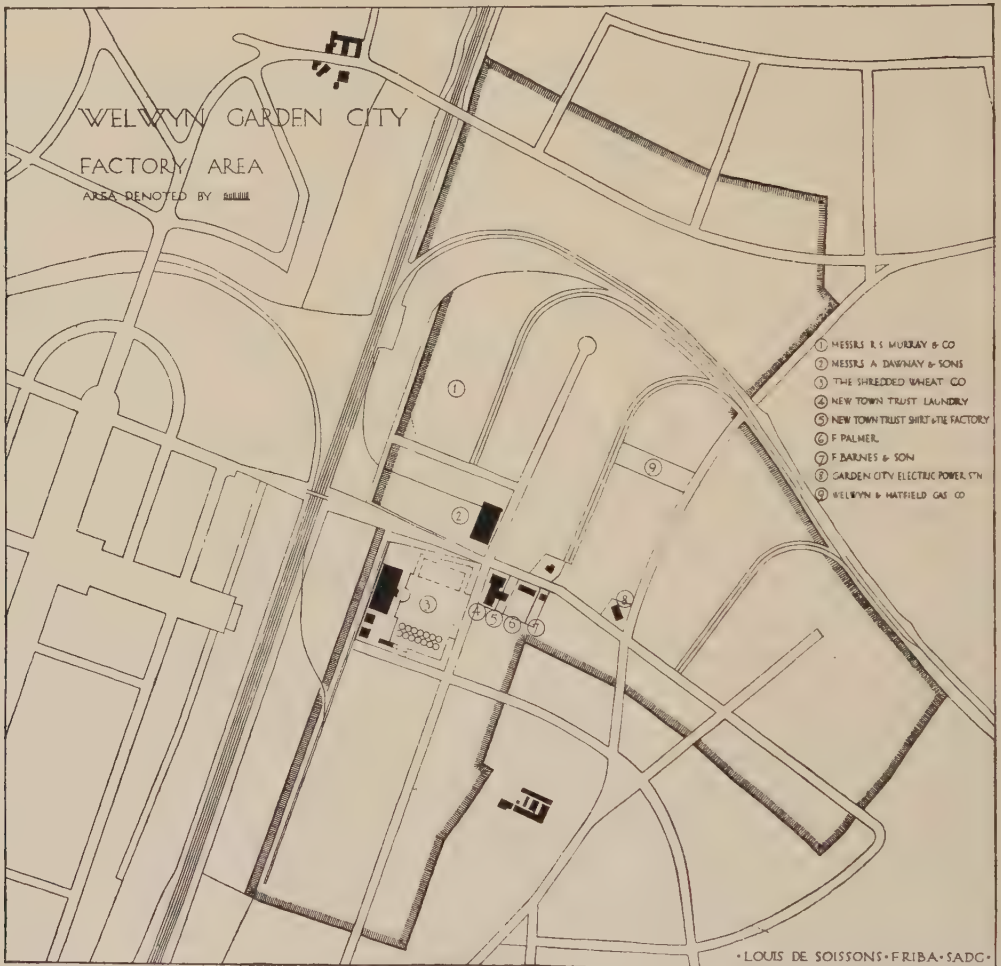
ALFRED MARSHALL, *The Principles of Economics*

#### § 1

THE town is laid out to provide for industry. With that object it was established, and judgment as to the success of the enterprise depends upon its success as an industrial centre. The site is naturally suited for factory building, being level and with good railway and road access. The factory area therefore received great attention with a view to providing the best conditions for industrial plants and at the same time preserving the amenities of the town. The result aimed at in the lay-out of the area was to bring it to a point of high development, so as to provide manufacturers with what they could not readily obtain elsewhere. The lay-out had to be done without reference to particular industries, but so as to provide sites readily adaptable to the needs of any industry that might wish to come. Arrangements had to be made for water, gas, and electric power, for the area was a virgin site with none of these facilities anywhere near it. Provision was made for railway sidings to be taken off the Hertford branch line and off the main line through the railway company's goods yard to be established. A system of common sidings was developed, so as to enable as large an area and as many factories as possible to be served by a single junction with the railway company's line. It was not intended to bring sidings across main roads, but they may cross subsidiary roads where these are not used for through road traffic. The development of the area was intended to be carefully controlled so that factories not requiring siding accommodation could be placed away from the railway. But in fact the attraction of sites in sight of the main railway line was too strong to be resisted and factories were placed there that did not need the railway at all. The roads throughout the factory area were designed for heavy motor traffic, and the arterial road to connect with the Great North Road was designed to run the shortest way through the town, so as to keep heavy goods traffic out of the residential and shopping areas as much as possible. The main electricity transforming station was placed in the area, so that supplies could be economically distributed; and the local gas company took land for gas holders, supplies coming to the town by high-pressure main.

## § 2

As the area of the town is limited by reason of its being a garden city, the industrial area is limited also, so that it becomes necessary to make the best use of the land available



FACTORY AREA (1925)

Showing road access, railway sidings, and relation to town centre.

for industrial purposes. One of the development problems of Welwyn Garden City, as it would be of other new towns, is to consider whether a prospective factory is likely to be of such a size and to employ such a number of people as would justify the disposal of the area of land required. The tendency of manufacturers is to be extravagant in their demand for land where it is comparatively cheap, because they have in view the securing of sufficient space for future possible extensions of their works; and as it is advisable to



offer land cheaply to attract manufacturers, especially in the early period, there is little or nothing in the actual cost of the land to discourage manufacturers from taking more than they are ever likely to use. At Welwyn Garden City the extent of the factory area was originally 170 acres, which allowed for thirty-four sites of five acres each. For-



FACTORY AREA: SHOWING DEVELOPMENT TO 1948

unately, however, the average demand for factory sites was for much smaller sites, many being under an acre. Another point is that if a larger area of land is taken than is actually needed the difficulty arises of keeping it in order; one way of getting over the difficulty is to use the land temporarily for sports clubs connected with the factory. It will be seen, however, that the problem is a real one. The garden city company could not afford to dispose of large parts of its industrial area unless they were to be productive,

so that the matter is one to which most careful consideration has had to be given. There is this much, however, to be said, that the industrial area was so planned that it was capable of extension, and is now (1948) 413 acres, with further increase in mind.

The number of insured persons employed in the town in February 1939 was as follows:

	<i>Building Operatives</i>	<i>Other Employment</i>	<i>Total</i>
<i>Men</i>	1,050	3,945	4,995
<i>Boys</i>	43	432	475
<i>Women</i>	5	1,029	1,034
<i>Girls</i>	2	407	409
<i>Totals</i>	1,100	5,813	6,913

There were at this date about 100 acres developed and built upon in the industrial area. From these figures it is possible to get some approximate idea of the industrial area required for a given working population. It is not, however, to be supposed that all the factories were at that date working to full capacity, so that they were capable of employing more workers. It was estimated that approximately the same number of industrial workers left the town daily to work elsewhere as came into it from outside.

### § 3

The industrial advantages offered at Welwyn Garden City as they were first defined were:

1. A planned industrial site, with road, railway, and other facilities.
2. Electric power and water at reasonable charges.
3. Low rates.
4. Space for extension of factory.
5. Clear atmosphere.
6. Houses for workpeople within walking distance of the factory.
7. Social amenities and entertainment for workpeople.
8. Good shopping facilities.

Two illustrations on the next and following pages reproduced from the advertisement pages of *Punch* in 1920 indicate the original presentation of these advantages to industrialists, who were presumed to be readers of that weekly paper. The main object that the company had in view was to attract established industries from London, and to offer facilities for the establishment of new industries. This was in the days before trading estates were known except for the old and successful Trafford Park, Manchester, and the Slough Trading Estate, which was formed to extend a war factory area at the same time as Welwyn Garden City was started. The new satellite town was, however, different from these two schemes, as it was in advance of the trading estates established later by the Government, because it provided not only industrial sites but houses for the workers too. To convey these ideas was attempted in the two advertisements. This could not be expected to evoke immediate response, but the seed was hoped to be planted to bear fruit in the perhaps distant future. This was among the long-range efforts of the

company from which immediate results were not likely, and to supplement it a programme of advertising in trade papers, circularization, organized trips to the estate, special trains and cheap fares (with the company's guarantee), and an office in the City of London were among the means adopted to bring what the new town had to offer to the attention of manufacturing firms and their staffs. It was no easy task when the town was still a mere project, for people are slow to understand what is not visible. They came to the site in the first few months expecting to see the town already growing before their eyes.

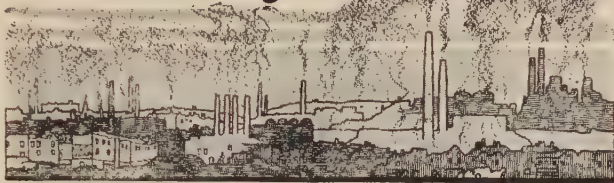
It was hard to convince industrialists that the town would in fact be established, and that there would in fact be houses for their staffs and workpeople; and although two important industrial firms took sites almost at the start they did not commit themselves to build, and did nothing but wait and see. This did not help very much, for without the factories the industrial housing could not be provided and without the houses the factories remained in the air. The solution was that houses should be built in advance, which required the consent of the Ministry of Health and Treasury

subsidies, and that factories should be built to let, which required capital that the company, faced with heavy development expenditure, did not possess at that time. However, as we have related in an earlier chapter, the work went on despite handicaps.

There are many obvious advantages in an organized factory area, planned in conjunction with residential development. The manufacturer is not isolated, but is able to get the benefits of open surroundings without suffering the trials of pioneering. An industrial site that allows reasonable room for expansion, and the advantages of which are not likely to be lessened in the future by unsuitable development taking place near it, is highly desirable for manufacturing purposes. Clear atmosphere diminishes the need for artificial lighting, and by careful design factories can be built to reduce

*Reproduced from the pages of "Punch" Christmas Number, 1920.*

## Yesterday



*Living and Working in the Smoke*

## To-day



*Living in the Suburbs - Working in the Smoke*

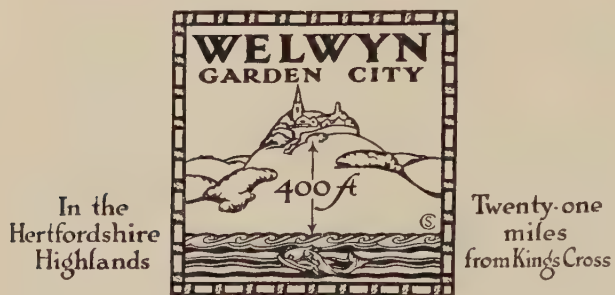
## To-morrow



*Living & Working in the Sun at WELWYN GARDEN CITY*



unnecessary fatigue, and in that and other ways add to the comfort and efficiency of the workers. The employer who takes an interest in the conditions under which his work is done should, it was thought, be attracted by garden city conditions. Not only are improved factory conditions possible, but healthy home life is ensured by well-planned



### The New Town for Residence & Industry.

**I**T is not good to waste two hours daily in trains buses and trams to and from the workshop, leaving no time nor energy for leisure or recreation



**A**T Welwyn Garden City a man's house will be near his work in a pure and healthy atmosphere



He will have time & energy after his work is done for leisure & recreation



buildings, which relieves factories of the burden of high rates, and places high-rated areas on more or less the same basis as the low-rated. Thus the 'natural' effect of economic laws is interfered with, which should indicate that a new political economy becomes necessary. In this as in other respects, the garden city is the product of a new order, for it is the antithesis of natural growth, being the work of design.

cottages. The employees do not have to travel long distances to their work, as they must in all the large cities. At the same time, there is no element of paternalism; for the worker is not living in an industrial village or in his employer's houses, but, though near his work, is a member of the general community and associates with the life of the town as a whole.

An important economic factor in the favourable industrial environment at Welwyn Garden City was the low rates, which meant a considerable saving in annual outgoings on a factory of any size. High land values and high rates make unfavourable conditions for industry. This advantage of the garden city factory has since been nullified by the system of derating of industrial

#### § 4

The following is a list of the manufacturing firms under their trades in 1948:

*Agricultural Implements:*

John Wallace & Sons Ltd.

*Brickworks:*

Herts Gravel & Brickworks Ltd.

*Corsets:*

Barclay Corsets Ltd.

*Costumes and Dresses:*

Cresta Silks Ltd.

*Engineering:*

Aranol Ltd.

Arrow Ltd.

Aviation Developments Ltd.

Brookside Engineers Ltd.

Dawnays Ltd.

Devices Ltd.

General Stampers Ltd.

Infra-red Development Co. Ltd.

Lacre Lorries Ltd.

Lincoln Electric Co. Ltd.

Neosid Ltd.

Pocklington & Johnson

Welwyn Electrical Laboratories Ltd.

Welwyn Engineering Co. Ltd.

Welwyn Foundry Co. Ltd.

Welwyn Metal Products Ltd.

Westover (Engineering) Ltd.

*Film Studios:*

Associated British Picture Corporation Ltd.

*Food Products:*

Atomised Food Products Ltd.

Bickiepegs Ltd.

Crown Macaroni Co.

Danish Bacon Co. Ltd.

Shredded Wheat Co. Ltd.

*Furniture and Toys:*

Welwyn Woodworkers Ltd.

*Glues etc.:*

British Glues & Chemicals Ltd.

*Grinding Wheels and other Abrasives:*

Norton Grinding Wheel Co. Ltd.

*Hair Brushes:*

Denman Products Ltd.

*Heating Engineers:*

James Coombe & Sons Ltd.

*Laboratories:*

British Rubber Producers' Research Association.

*Laminated Interior Building Blocks:*

Hitchins Assembled Interiors Ltd.

*Lead Pipes and Sheets:*

British Lead Mills Ltd.

*Manufacturing Chemists:*

Akis Chemical Co. Ltd.  
Bourne Chemical Industries Ltd.  
Carnegie Chemicals (Welwyn) Ltd.  
Herts Pharmaceuticals Ltd.  
Roche Products Ltd.  
Stafford-Miller Ltd.

*Moulded Products:*

O. & M. Kleeman Ltd.

*Moulding Powders for the Plastic Industry:*

I.C.I. Ltd. (Plastics Division)

*Optical Instruments:*

The Watson-Baker Co. Ltd.

*Paints, Varnishes:*

Gerald Carter & Co. Ltd.

*Plastics:*

Plastra Components Ltd.

*Printers:*

Broadwater Press Ltd.  
Chiswick Press Ltd.

*Process Blocks:*

Kestron Ltd.

*Radio and Television:*

Murphy Radio Ltd.

*Sandpaper, etc.:*

B.C.R. Factories Ltd.

*Scrapers:*

Skarsten Manufacturing Co. Ltd.

*Seed-sorting Machinery:*

Simplex Seed-Sorters Ltd.

*Strings and Cords, etc.:*

Alba Strings Ltd.

*Sweets:*

J. W. Bindley & Co. Ltd.  
A. Buchanan & Sons Ltd.

*Theatrical Accessories:*

Eylure Ltd.

*Upholsterers, etc.:*

Household Services Ltd.

*Vitreous Enamels:*

Ferramic Industries Ltd.

*Vulcanite Products:*

Barnet Comb Co. Ltd.  
E. R. Holloway Ltd.  
Lustrac Plastics Ltd.

*Waterproofers, etc.:*

Catomance Ltd.



## § 5

The Shredded Wheat factory, the first important industrial building, has become a striking feature of the landscape. It is a large building of white cement and tile, designed to ensure cleanliness and sanitation, and with dining, rest, and recreation rooms for employees. It was planned to use British labour and British wheat. Farmers were encouraged to grow a good quality of white winter wheat for the product, the process of the manufacture of which is interesting. The wheat is subjected to nine processes of cleaning, after which it is steam cooked, shredded, formed into cakes, and baked. After baking, it is put through an evaporator, where moisture is removed, thus ensuring its keeping qualities for an indefinite period. It is then packed in cartons, sealed with automatic machinery.

The late J. W. Bryce, managing director of the Shredded Wheat Co. at the time, when asked by the present writer why Welwyn Garden City was chosen as the site for the British factory out of the many that were considered, made the following reply:

That 'cleanliness is next to godliness' is a truth fully and unqualifiedly accepted by the executive of the Shredded Wheat Company. It believes that all food for human consumption should be manufactured under the most rigid sanitary conditions and amidst surroundings that are cleanly, healthful, and pleasant. Therefore in selecting a location for a site for the British factory, Welwyn Garden City was chosen as more nearly conforming to these ideals than any of the other sites offered.

There are a number of other reasons for our choice which emphasized the value of it from other standpoints, first of which is the housing of our staff, as we expect both our office and factory staff to live in Welwyn Garden City, so that they and their families may have the benefit of the new and ideal housing conditions of the town, and also that the cost of transportation to and from their work should be minimized.

Another reason was that we could get suitable railway siding accommodation for receiving goods into the factory, and for the transport of our products to the various parts of the British Isles.

It was also considered a valuable site for the reason that our goods are manufactured from wheat, and as we expect to use British wheat only, we believe that we can get all the grain necessary from the agricultural district within a radius of fifty miles.

Again, the location is but twenty-one miles from London, and London trade can be handled very nearly as well from Welwyn Garden City as from any site in the centre of London, while being free from the smoke, grime, and fog that London is apt to indulge in.

As managing director, I was so impressed with Welwyn Garden City that my wife and I were satisfied that it would be an ideal place to live in. Therefore we are now confirmed residents of it.

Having some knowledge of the prospective plans for the development of the town, I am of the belief that within a few years it will have progressed to such an extent that the improvements necessary to make it not only a clean, wholesome place, but a beautiful place, will have been fully developed.

What the Shredded Wheat Company expects to do in the development of its business in Welwyn Garden City is to make a factory which is both outwardly and inwardly a clean, sanitary building, with as much beauty added to it as may be possible to any manufacturing concern. It has always been the policy of the company, wherever located, to pay such attention to the welfare and betterment of its employees and to make the factory one of the best, if not the best, manufacturing institutions, that work becomes not a task but a pleasure. The English company has that policy in mind and will develop as fast as possible along the lines consistently pursued by the parent company. We have a dining-room at which all the employees of the factory can receive their

midday meal at a nominal cost, or free; shower-baths and sanitary toilet-rooms are furnished, with a rest-room for women and a smoke-room for the men, while many other good things will be developed as we grow, the staff being given as full consideration as it is possible to give them. The idea we have is to make in England what we have in other places, a great Shredded Wheat family, whose one aim is to live well and cleanly, the employees giving work for value received, and the company giving liberal remuneration for that work apart from any betterment conditions which may from time to time be installed.

Similar questions to those put to the industrial firms at Letchworth were also put to the firms operating at Welwyn Garden City, with the results given below.

### (1) Reasons for coming to Welwyn Garden City?

Availability of site, proximity to London; in 1937 frequent and fast trains to London at low fares, proximity of to railway and Great North Road, and (again in 1937) low rent and rates.

*Atomized Food Products Ltd.*

Lack of suitable factories in the London area. *Aviation Developments Ltd.*

As an American company the idea of a garden city appealed greatly to us. *Barclay Corsets Ltd.*

In 1934 the town was a growing industrial centre of some promise and we were attracted to it on that account and because of its proximity to London, where our warehouse and showrooms were then situated. *The Barnet Comb Co. Ltd.*

We selected this town to come to in 1927 because we could not find suitable accommodation for renting anywhere in London. *Bickiepegs Ltd.*

To find better working conditions than existed in London and to develop fresh markets.

*The Broadwater Press Ltd.*

My home being at Tewin, Welwyn Garden City was conveniently placed when we determined to start another new industry. The policy of the Welwyn Garden City company of building a number of sectional buildings, four walls and a roof, thus leaving complete freedom of development, determined my choice, rather than the alternative of (for example) Hertford town, where any ready erected vacant factory would, by its design, impose an unrelated pattern on the lay-out. Only an industry long established, late middle-aged so to speak, can afford to crystallize within the restraints of a functionally planned building—unless the activity be sufficiently profitable to allow free scrapping and rebuilding or abandonment of one site for another very frequently, the more frequently the closer to the functional plan. *Catomance Ltd.*

Our reasons for coming to Welwyn Garden City were: (a) That I had watched the garden city movement with interest since its inception and had always thought the idea a good one; (b) having as a young man had to catch a train at 7.30 a.m. a mile away from my home, in order to reach my father's business, thirty miles away, I decided that as soon as I could manage it I would live near my works; I liked country life and I liked town life and I wanted to be able to combine both; (c) the opportunity to have an experimental factory and eventually build to my own requirements appealed to me as one who was starting a new business; (d) I wanted similar conditions for my workers as those I thought right for myself; (e) Welwyn Garden City was near to London and for many reasons, business and cultural, I wanted to be within easy reach of town. *Cresta Silks Ltd.*

We were attracted to Welwyn Garden City because of its character as a garden city, with its many trees and grass verges, and the absence of slums. *Crown Macaroni Co.*

Permanent decentralization from London and also as a security move (in 1938).

*Danish Bacon Co. Ltd.*

Our reason for establishing our business of vitreous enamel manufacturers at Welwyn Garden City was because it seemed ideal from our point of view, being clean and free from smoke.

*Ferramic Industries Ltd.*

Welwyn Garden City was first considered by I.C.I. as a site for plastics manufacture at about the time of the formation of the Plastics Group (now Plastics Division) in 1936. The Black Fan Road site was acquired and building was started in 1938. Extensions have been made there and options on adjoining land have been secured since that date. The main considerations were:

(a) To be near the consumers of moulding powders for efficient technical service and demonstration. At that time 70 per cent of the company's moulding powders were fabricated into moulded articles in the London area. A site within thirty miles of London and with good rail and road access was needed.

(b) The plastics industry showed promise of rapid development, and room for expansion both of the works and of the town itself were regarded as essential.

(c) It was thought that plastics manufacture, apart possibly from the heavy chemical operations involved in making the chemical raw materials, should be carried out in clean and pleasant surroundings and not in the smoky or dirty atmosphere of heavy industry. Welwyn Garden City fulfilled these conditions.

(d) It was considered that the amenities provided by the garden city were such as to attract the type of staff and workers we wished to encourage to enter the plastics industry.

(e) It was necessary that the cost of production should be as low as possible consistent with the above requirements. Although costs of services, such as electricity, gas, water, and fuel, are high compared with the industrial north, they compare reasonably with other places in the London district.

(f) A minor consideration was that I.C.I. owned the firm of Mouldrite Ltd., which had a small factory in the garden city on a small site now occupied by Roche Products.

*Imperial Chemical Industries Ltd., Plastics Division.*

We were influenced by its proximity to London, adjacent to the railway, cheaper rents, and the possibility of development. *Lincoln Electric Co. Ltd.*

This firm came to Welwyn Garden City mainly because of the good living and social conditions that it offered, and because suitable factory premises were ready and available.

*Murphy Radio Ltd.*

The facts are as follows. In 1929 a special commission consisting of executives of the Norton Co., Worcester, Mass., U.S.A., was deputed by the general manager to visit England for the purpose of making a survey of industrial centres in order to choose and to report upon the location considered suitable for a British subsidiary. The commission saw the great industrial centres of the midlands and the north, where houses and factories jostled together in a murky environment, and was very much impressed by the contrast of Welwyn Garden City to the older and bigger towns. The general manager had expressed the requirement that the workmen should live near to their place of work, also the wish that the locality should have good homes for the workmen, with garden space for recreation in leisure, and good surroundings. It was reported that Welwyn Garden City was the commission's choice, being pleasant to live in, and a congenial place in which to work. It was felt that one of the great advantages obtained from the site was the ability to secure a stable, high-grade staff, living in a community which enjoyed wide renown as an example of all that was best in town-planning. *Norton Grinding Wheel Co. Ltd.*

To obtain a light and roomy factory under healthy conditions. *Pocklington & Johnson.*

The combination of a garden city residential district with a modern but adjacent factory quarter seemed ideal for any manufacturer. *Roche Products Ltd.*

Welwyn Garden City was chosen as the ideal site for the manufacture of shredded wheat. Its freedom from smoke pollution, its permanent open spaces, and the careful planning of its manufacturing area, ensure that pure air, sunshine, and rural amenities better conditions for health. *The Shredded Wheat Co. Ltd.*

When Mr. Skarsten decided to leave the United States and start a factory in this country, he chose to settle in Welwyn Garden City because it is a clean, open town with a pleasant situation



and also conveniently near to London. As we do a considerable export trade, the proximity to London is an advantage. *Skarsten Manufacturing Co. Ltd.*

We came here because this factory happened to be available and was suitable for our requirements. *Watson-Baker Co. Ltd.*

Primarily the provision of factory space at reasonable rentals, which is of great assistance in starting up an industrial undertaking. *Welwyn Electrical Laboratories Ltd.*

We first came to Welwyn Garden City for the purpose of manufacturing during the war as we were engaged on urgent work for the royal arsenal. *Welwyn Engineering Co. Ltd.*

(2) Has your experience of Welwyn Garden City as an industrial centre been satisfactory?

Prior to 1939 satisfactory; but limitation to increase of labour and expansion have made the present position most unsatisfactory compared to other areas where such restrictions do not exist. *Atomized Food Products Ltd.*

Reasonably so—but we have suffered considerably from a shortage of labour, both skilled and unskilled. *Aviation Developments Ltd.*

We have found Welwyn Garden City very satisfactory indeed, excepting, of course, during recent years when labour supply has become so difficult. As our business is one for skilled labour we cannot make use of the floating labour force which is available, and in consequence considerable difficulty has been experienced in maintaining a sufficiently high rate of production to meet the need. *Barclay Corsets Ltd.*

Not entirely. The labour position even prior to the war was never good. The supply of unskilled and skilled labour has never been adequate nor reliable. This would appear to be due mainly to the fact that workers are drawn from all parts of industrial England and Wales.

*The Barnet Comb Co. Ltd.*

Yes. *Bickiepegs Ltd.*

Yes, eminently. *The Broadwater Press Ltd.*

Speaking solely from an industrial standpoint, no, but siting of the plant there in my particular circumstances has been advantageous. A plant will be maintained at Welwyn Garden City, though now that other developments become possible part of the activity will be transferred to London and another part to Huddersfield. *Catomance Ltd.*

On the whole, my experience of Welwyn Garden City has been satisfactory. For the first year or two in an acute form, and in fact ever since I started, it has been harder to get labour here than it ever was in other districts where I have had or have businesses. But our labour turnover at Welwyn Garden City is less than in any of our other centres. *Cresta Silks Ltd.*

Our experience of the garden city as an industrial centre has been very satisfactory. We find the proximity of the residential quarters to the factories most advantageous, and Welwyn Garden City is ideally situated for good factories, owing to the absence of smoke and smoke-causing industries. *Crown Macaroni Co.*

Generally, yes. *Danish Bacon Co. Ltd.*

In our experience, Welwyn Garden City as an industrial centre has been satisfactory, with the exception that we have found a great lack of facilities for getting jobbing engineering work done. One would have thought that with so many small plants, which cannot maintain an engineering shop themselves, provision would have been made for this sort of work. *Ferramic Industries Ltd.*

In general the reasons which led to the selection of Welwyn Garden City have proved to be well founded. Following the second war, the expansion of Welwyn Garden City, which is not in a

development area, has not been fast enough to provide the labour for the plants we planned to erect here and it has been necessary for a time at least to concentrate in the north, in areas where labour and housing are less difficult. Recently also, Welwyn Garden City, in common with the rest of the London area, has suffered more than the northern factories from coal and electricity shortages. Otherwise there has been no technical difficulty in expanding at Welwyn and several additions were made to the original manufacture of urea-formaldehyde moulding powders, e.g. polyvinyl chloride, nylon monofil, 'Kallodent' denture materials, and phenolic resins.

Welwyn Garden City has in fact been found to be a better centre in one respect than was expected in 1938. Following the transfer of I.C.I. plastics research from Billingham in 1940 all the administration, technical service, and development has been concentrated and extended at Welwyn with the advantages of nearness to customers, government departments, and three large university centres. The garden city and the surrounding district would also in normal times attract the right type of staff for these purposes. *Imperial Chemical Industries Ltd., Plastics Division.*

Our experience has been very satisfactory. *Lincoln Electric Co. Ltd.*

The experience has been satisfactory. *Murphy Radio Ltd.*

Yes, generally speaking. *Norton Grinding Wheel Co. Ltd.*

Yes! except from the labour and housing standpoint, also factory space. *Pocklington & Johnson.*

Our experience confirmed that this was so until the outbreak of war when scarcity of living accommodation for employees proved a severe handicap. The position has actually become worse since the cessation of hostilities owing to the disfavour of the Government to industrial expansion in Welwyn Garden City. *Roche Products Ltd.*

Our experience of the town as an industrial centre has been satisfactory.

*The Shredded Wheat Co. Ltd.*

Our experience of Welwyn Garden City as an industrial centre has been entirely satisfactory—in normal times at least. *Skarsten Manufacturing Co. Ltd.*

No. *Watson-Baker Co. Ltd.*

Our experience has been the reverse of satisfactory. *Welwyn Electrical Laboratories Ltd.*

Our experience of manufacturing in the garden city has on the whole been reasonably good, as conditions of work are good and labour has been, on the average, fair.

*Welwyn Engineering Co. Ltd.*

(3) Can you indicate the advantages you have found in the town as an industrial centre?

See our reply to question 1, to which may be added a clean open site for manufacture of food.

*Atomized Food Products Ltd.*

The advantages we have found have been those in connection with transport, close proximity to London, hygienic conditions both in the works and in housing accommodation. In addition, we have found that the presence of a variety of industries gathered together in one centre has been of considerable help from the point of view of mutual assistance. *Aviation Developments Ltd.*

We think there are many advantages in a town such as this for an industrialist, and regard the situation of premises so near the homes of the people to be a very great advantage, although a considerable portion of our labour is recruited from outlying villages. *Barclay Corsets Ltd.*

Pleasant, open healthy surroundings. *The Barnet Comb Co. Ltd.*

Labour is of a better class than in large cities, and the employees have no long train journey. From an advertisement point of view, Welwyn Garden City is ideal for food manufacture—clean air, neat and tidy town, trees and flowers, clean factories. Visitors are favourably impressed.

*Bickiepegs Ltd.*

The advantages are: (a) Proximity of members of the firm to their homes; (b) sufficient local support to carry a young firm through its initial stages together with sufficient accessibility to London to give scope for expansion with growth; (c) possibility of closer contacts, with the consequent increase in mutual helpfulness, amongst manufacturers than is easy in larger towns where many firms are strangers to one another; (d) the type of person attracted to the garden city seems on the whole to be one receptive to new ideas; there is a certain similarity of outlook—not too close to be monotonous—and a friendliness conducive to growth and progress; (e) the comparative smallness of many of the firms makes interchange of ideas between management and workers easy; it also prevents narrowness of outlook. *The Broadwater Press Ltd.*

In my opinion only dead things or things destined to die soon can be 'capital P' planned. One must remember the dinosaur. The road system of Welwyn Garden City is out of date, and the water supply and particularly the drainage system hopelessly inadequate. The former could hardly be remedied and leave much of the original plan; the latter I believe cannot now be improved. The industries may therefore remain unbalanced and become progressively more so. There is a chronic shortage of locally useable labour. *Catomanse Ltd.*

We are having to have buying and export offices in London because it is not easy, with the present bad train service, to get business men to call on us at Welwyn. But an increasing number of business men seem ready to make one visit to us here so that at the same time they can satisfy their curiosity as to what Welwyn Garden City really is. *Cresta Silks Ltd.*

The smallness of the town creates much closer co-operation between the individual properties and managers of the factories. *Crown Macaroni Co.*

Proximity of workers to their employment. Better health and better housing.

*Danish Bacon Co. Ltd.*

We cannot indicate any particular advantages that we have found in the town as an industrial centre, except that it has always been looked upon as an extremely pleasant place to come to by those of our friends who visit us. *Ferramic Industries Ltd.*

The advantages have included availability of factory premises to meet our expanding requirements, along with provision of houses for growing labour force (small in 1929, and now 1,500). Rail transport facilities are convenient, and all normal services are available. *Murphy Radio Ltd.*

Before the second war it was considered advantageous to be accessible to London, and to the main traffic arteries to the midlands and the north. The many groupings of officialdom being centred in London still maintains the vantage point of Welwyn Garden City.

*Norton Grinding Wheel Co. Ltd.*

As our previous factory was mostly below ground the advantages will of course be obvious—better health. *Pocklington & Johnson.*

The advantages gained are, workers living within easy reach of their employment and thus a saving of time and money travelling to other places. There are in addition many social activities in the town for the enjoyment of all. *The Shredded Wheat Co. Ltd.*

We have found our association with other factories in the garden city most harmonious and helpful. *Watson-Baker Co. Ltd.*

The undoubted advantages of having reasonable factory and office space in pleasant surroundings within reasonable distance of London, and the great market in the home and southern counties, are of course offset by the present limitation of space and the inadequacy of labour supply. *Welwyn Electrical Laboratories Ltd.*

Concrete advantages would be difficult to state, but one valuable point we can mention is the willing co-operation of other manufacturers in the garden city which has been of great help at times. Rail transport is, however, poor and there are no material supplies available in the garden city of the type that engineering companies require to call upon from time to time.

*Welwyn Engineering Co. Ltd.*



(4) What are the improvements required in the town from an industrialist's point of view?

Greatly improved housing facilities to attract labour, alternative shopping facilities, greatly increased amenities to draw residents to the area, improved communications, including internal bus service, more frequent trains and buses to London, Hertford, Luton, and St. Albans. All these to attract residents and other industries and eventually to reduce rates and increase ancillary services required by industry. *Atomized Food Products Ltd.*

(a) A large amount of extra housing in order to attract an adequate supply of suitable labour. (b) Additional factories are required suitable for manufacturers employing more than 200 people. The majority of the present types of building cater only for the smaller employer; they can of course be grouped to provide for larger units, but they do not lend themselves to a shop lay-out of maximum efficiency. (c) Some employees find the town 'dead' and prefer the amenities, such as they are, of larger places. A suitable mean between those places and the present state of Welwyn should be found. *Aviation Developments Ltd.*

The improvements required from an industrial point of view are, of course, increased housing to provide the means for an increased labour supply, and all the amenities which a town needs for recreation, social, and cultural activities. *Barclay Corsets Ltd.*

A considerable increase in workers' accommodation, to improve the general labour position, is needed. *The Barnet Comb Co. Ltd.*

Wider range of industry should be attracted, towards a self-supporting principle, followed by a greater commercial relationship between all firms; e.g. a small firm wishing to make nuts and bolts should be attracted here and encouraged to market their goods locally. *Bickiepegs Ltd.*

At present the facilities are basically adequate. There are certain improvements, such as the provision of a civic centre and an increase in the scope of certain services—e.g. the water supply—which are desirable in the future when the town's population justifies them, which at the moment it does not. Doubtless they will come when the right time arrives. *The Broadwater Press Ltd.*

The designers of Welwyn Garden City did not foresee the future (even the relatively near future)—who could? It's almost a natural law that the more specialized the design the swifter the obsolescence, the more organized the system the smaller is the defect of any function sufficient to cause death. *Catomance Ltd.*

Obviously the town centre ought to be built up as soon as possible so as to provide some 'town attractions' for those who want them. And lack of sports facilities interferes with the attraction of the place. What I feel is the danger now is that new firms will be allowed to come here before established firms have had the opportunity of carrying out the developments they had originally planned. We ourselves are starting a clothing factory in one of the distressed areas because we do not feel that we can rely upon getting the increase here which our business requires. The limitation of the town to 35,000 population will of course aggravate the situation. *Cresta Silks Ltd.*

The foremost improvement necessary from an industrialist's point of view is a better railway service to London, and the widening of the railway traffic bridge, which is a hindrance and danger, especially during peak hours. *Crown Macaroni Co.*

More housing—but an upward limitation in size. *Danish Bacon Co. Ltd.*

From an industrialist's point of view, we consider that the estate company should not be so determined in their attitude of preventing factories from making full use of their ground. In our particular case it is essential that a ten-foot space should be preserved all round the buildings up to the fence, whereas if a brick wall set the boundary it could be effectively used in the increased manufacture of our products. We quite agree, however, that the lawn effect in front of the buildings and the general style of architecture should be preserved, thus conforming to the garden city's ideas of a planned town. *Ferramic Industries Ltd.*

In answering this question we start with the assumption that Welwyn Garden City is not a suitable centre for the manufacture of heavy chemicals, which should be made elsewhere and brought to Welwyn for further processing. On that assumption two improvements required are: (a) Removal of the restrictions on housing, building, etc., and on the expansion of the garden city, which have already been mentioned. (b) Although the general plan and lay-out of the garden city is an improvement on that of most towns which have 'grown up,' it is lacking in amenities which attract both staff and workers to a neighbourhood. These deficiencies are well known and will no doubt be made good as soon as circumstances permit. There is a shortage in particular of facilities for most types of recreation and entertainment.

*Imperial Chemical Industries Ltd., Plastics Division.*

The main improvement is an increase in available labour and consequently of housing accommodation. *Lincoln Electric Co. Ltd.*

The improvements required in the town now (since the war) are a more rapid provision of houses and supply of additional local workers in step with industrial expansion. Also more shops and entertainment facilities. It is fair to say that the war has caused a lag in the development of these improvements. We think Welwyn Garden City, as a planned industrial centre, should be given more priority for building and influx of labour than it is at present getting. Our normal expansion here is limited by lack of these priorities. *Murphy Radio Ltd.*

Any improvements from an industrialist's point of view must take into account the reactions of the worker or potential worker to things as they are. The lack of adequate and competitive shopping facilities in Welwyn Garden City used to be cited as a shortcoming, but possibly owing to the general condition of shortages this observation is not quite so prevalent nowadays. Improved transportation facilities within the town seem to be desirable, as is also the provision of a cinema on the east side, among other amenities. Of paramount importance from the industrialist's standpoint is the need for more houses, and this problem remains acute for worker and employer alike.

*Norton Grinding Wheel Co. Ltd.*

It is difficult to say, but from our point of view factories are the right size, etc., but as far as office space and location are concerned it seems that something brighter and more roomy should be provided. (a) Telephone service should be improved; (b) travelling facilities improved; (c) the smaller manufacturer should not be overlooked. *Pocklington & Johnson.*

The reversal of the Board of Trade's present policy, which is an embargo on new industrial buildings in Welwyn Garden City. *Roche Products Ltd.*

Industrialists generally would welcome more houses and shops, which should encourage new residents, and thus help to supply labour for expansion of business in future years.

*The Shredded Wheat Co. Ltd.*

As regards improvements, we need more factory space and more skilled workers and no doubt the latter problem would be solved if there were more houses for workers.

*Skarston Manufacturing Co. Ltd.*

Much improved railway facilities and increased accommodation for workers.

*Watson-Baker Co. Ltd.*

The following would certainly be desirable improvements from our point of view: (a) A source from which engineering supplies could be drawn. (b) Considerable improvement in the means of rail transport of our products to various parts of the country. (c) Better clearance of trade refuse from the works. *Welwyn Engineering Co. Ltd.*

It will be observed that most firms offer their remarks upon the advantages of the town with qualifications, and that what the drawbacks amount to apart from the need expressed for a higher form of industrial organization are: (a) rail facilities are inadequate, (b)

facilities for entertainment and recreation are insufficient, (c) more houses are required, and (d) the town is not large enough. The fact that the town has no priority for industrial building is acutely felt, and is difficult to understand. When the inquiry was made, one manufacturer was in process of leaving the town for the north of England because he could not get the larger manufacturing space he needed. By the side of this fact, there is the absence of encouragement for house building, so that the demands for additional workers cannot be met. No doubt the building difficulties will at some time be overcome, but at present they press heavily upon all industrialists who wish to expand, and are highly discouraging. It has to be recorded that since the beginning of the war when factory building became dependent upon Government permission, up to the time of writing, there has been no official disposition to recognize the position of Welwyn Garden City in industrial planning or to provide it with facilities. The same may be said of Letchworth.

One of the important future industries of the town is likely to be the railway itself. The position of the town as a railway junction, and the concentration of engine sheds, repair shops, etc., which is foreshadowed, will bring a considerable railway population.

## § 6

The erection of sectional factories for letting was first undertaken in 1926, primarily as a means of stimulating industrial development by creating facilities for small firms to make a start under reasonable conditions. The first group of factories consisted of twelve small buildings ranging from 1,700 to 3,000 square feet each. With very little interruption, new sectional factories were continuously built until war conditions in 1941 brought building to a standstill.

The following table shows the extent of sectional factory construction during this period:

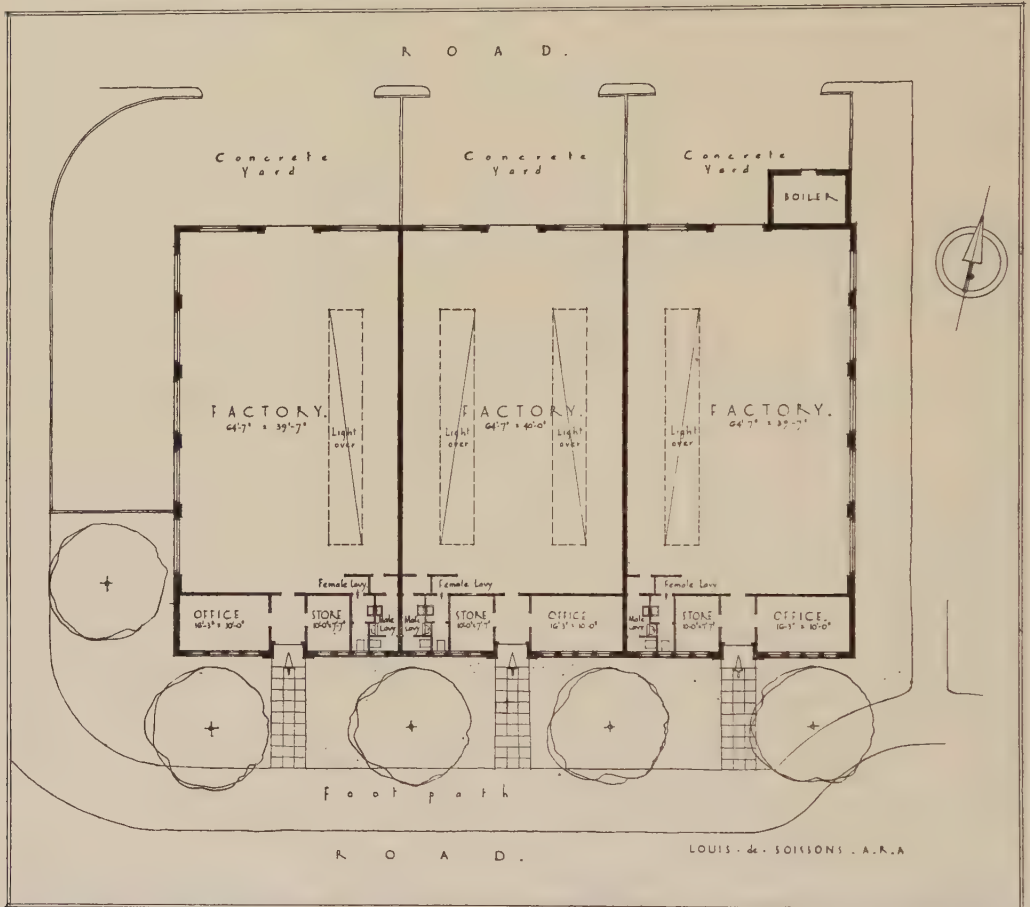
<i>Year Ended</i> <i>31st March</i>	<i>Square Feet</i>		<i>Year Ended</i> <i>31st March</i>	<i>Square Feet</i>	
	<i>Annual</i>	<i>Total</i>		<i>Annual</i>	<i>Total</i>
1927	7,713	7,713	1935	—	173,893
1928	17,664	25,377	1936	24,341	198,234
1929	11,626	37,003	1937	147,388	345,622
1930	33,507	70,510	1938	24,259	369,881
1931	15,854	86,364	1939	36,319	406,200
1932	33,066	119,430	1940	44,785	450,985
1933	54,463	173,893	1941	41,500	492,485
1934	—	173,893			

In the course of time the company evolved a method of dealing with these sectional factories which has stood the test of experience. They are built in blocks of three or four sections, the partition walls being omitted until the letting of the factories has been negotiated, thus enabling a tenant to consider taking one, two, three, or four sections according to his requirements. As the size of the individual blocks may differ there is thus a range of sizes and shapes of factories for the consideration of potential tenants.



Office and lavatory accommodation is also left in a partially completed state, so that adaptations can be made to suit individual requirements.

With one exception all the sectional factories are single storey as it has been found more suitable to build in this form. In the later groups, however, two-storey frontages



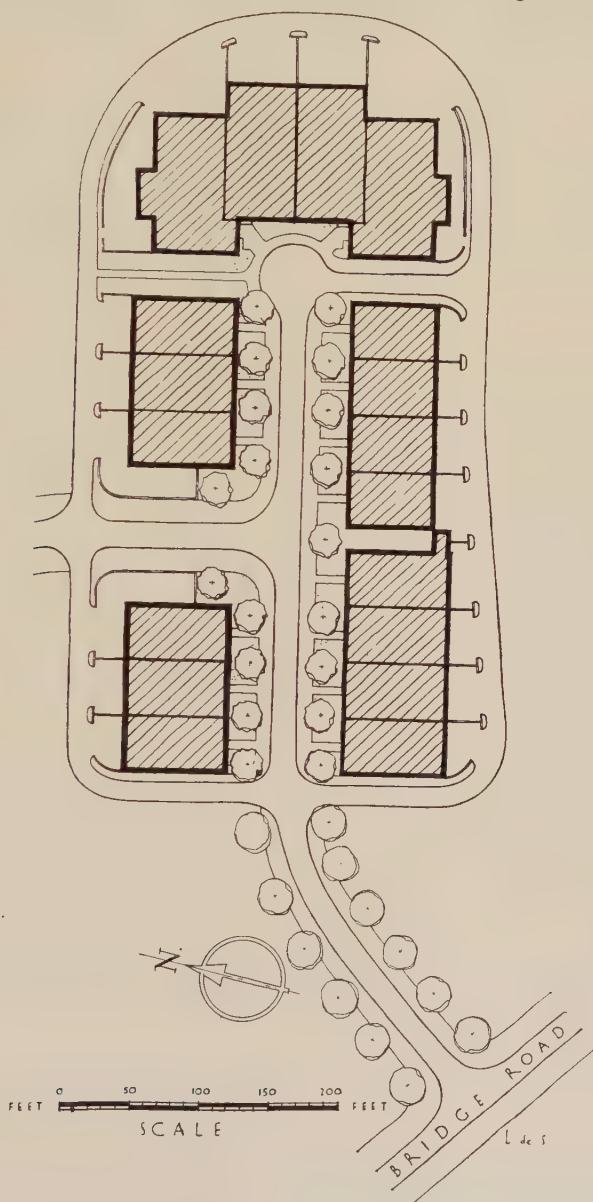
A GROUP OF THREE SECTIONAL FACTORIES SO DESIGNED AS TO BE USED SEPARATELY OR AS A WHOLE (1937)

have been built for offices so that a good architectural effect is secured. Service roads are constructed to the rear of the factories.

A certain amount of special building to meet the requirements of tenants has been undertaken, sometimes with an option to purchase included in the tenancy agreement. Some of these options have been exercised.

At the present time a half-million square feet of factory space is occupied by forty-one tenants. One of the best known is Murphy Radio Ltd., a company which started operations in one of the smallest of the sectional factories. To-day, this business occupies about 150,000 square feet of the company's sectional factory space.

The sectional factories are built by Welwyn Commercial Buildings Ltd. on land held on lease from the company. Welwyn Commercial Buildings Ltd., as a result of the



LAY-OUT OF A GROUP OF EIGHTEEN SECTIONAL FACTORIES IN WOODFIELD ROAD (1937)

intensive development of the land for industrial purposes, is able to pay a higher rate of ground-rent than that fixed for general industrial sites, and the financial arrangements which that company was able to make before the war enabled the standard rent of

sectional factories to be maintained at an average of about one shilling a square foot, exclusive of rates and such special costs as heating and ventilation. Current costs are, of course, much higher, and the opinion is that the future rental figure is likely to be about twice the pre-war figure.

Although the company's architectural and constructional organization was in full working order when the war broke out, and developed and partially developed sites for industrial purposes were available, and despite the fact that the company offered to build war factories with the object of their being used for industry when the war was over, no use was made of the organization and no attention was given to the offer. This provides, perhaps, a commentary upon the shortcomings of bureaucracy in its contacts with industry.

### § 7

The building of the town was the town's first industry and will remain its primary industry until the town is finished. The building industry will continue to be active always, however, for not only have buildings to be maintained and extended, but to be rebuilt. The company relied upon contractors to start with, as already has been explained, but, as also has been explained, it soon decided to set up a building organization of its own. With that object Welwyn Builders Ltd. was established. This undertaking carried out all the company's work, including road-making, sewers and water main laying, and other civil engineering. In the course of time the organization undertook work outside the town and entered into general contracting. It is safe to say that without this building organization the work of the company would not have proceeded as it did.

Of course, other builders came into the town to work on contract, or to carry out building schemes of their own, and the policy of the company was to attract as many builders as possible. In fact, however, the leasehold system of land tenure, which did not provide scope for land speculation by builders or their financiers, prevented builders from operating in the town except to a limited extent. The builders who have established themselves and are (1949) still operating are Frederick Palmer, D. C. Pearce & Son Ltd., and C. E. Bowyer. Other building contractors have appeared from time to time on contracting jobs, but they afterwards vanished.

A further note upon Welwyn Builders Ltd. is worth making. Before the war the building staff fluctuated between 1,200 and 1,500 operatives, but by the end of the war the number had fallen to below 100. As there were then no houses that could be offered to those operatives who had left the town to persuade them to rejoin the concern for the purpose of recommencing development, the company was faced with difficulty in re-creating its organization. As we know only too well, the building industry as a whole is riddled with frustration and discontent, resulting in output that at least at one time had fallen to 50-60 per cent of the pre-war rate. The company was further embarrassed by the fact that while the building workers were as much participating in the work of making



the town as any others, all other groups of workers enjoyed better and more secure terms of employment than those deemed practicable in the building industry.

To deal with this situation the company decided in 1945 to approach the whole subject in a new way and to set up a building unit fully able to carry out the large programme that was projected. Accordingly it offered to enter into an agreement with the National Federation of Building Trade Operatives embodying terms of employment in line with those enjoyed by the staffs of the company's organization as a whole. A joint production committee was formed for the purpose of settling the details, and the outcome was the decision to create a permanent staff with the intention that at least 70 per cent of the building employees should immediately be appointed to it, election being dependent upon nomination by the operatives' representatives on the joint production committee. The agreement was entered into in April 1946, and renewed with slight modification a year later. In addition to the terms of the agreement, members of the permanent staff of the builders are entitled to a staff discount of 10 per cent on all purchases made at Welwyn Stores in common with other employees of the company, whilst they also participate in any bonus declared for the staffs of the companies as a whole. Further, 50 per cent of all new weekly rented houses built by the company are allocated to members of the permanent staff according to grading of hardship on the recommendation of the operatives' representatives on the joint production committee.

The result of this scheme during the last year and three-quarters was, so the company states, to create a first-class spirit amongst the men, who have collaborated to the fullest extent to ensure the success of the arrangement. The men's representatives have also not hesitated to use appropriate disciplinary measures when necessary to ensure that the scheme is not jeopardized. The report is that taken as a whole the present output is almost at the pre-war level, apart from the interruptions due to difficulties in the supply of materials, and that it is very doubtful whether these terms of employment have involved any substantial increases in costs compared with those accepted as the present-day standard by the building industry. At a time when lack of satisfactory organization in the building industry generally is notorious, this attempt to remedy some of the defects in an industry that have caused large numbers of men to leave it is notable.

## CHAPTER V

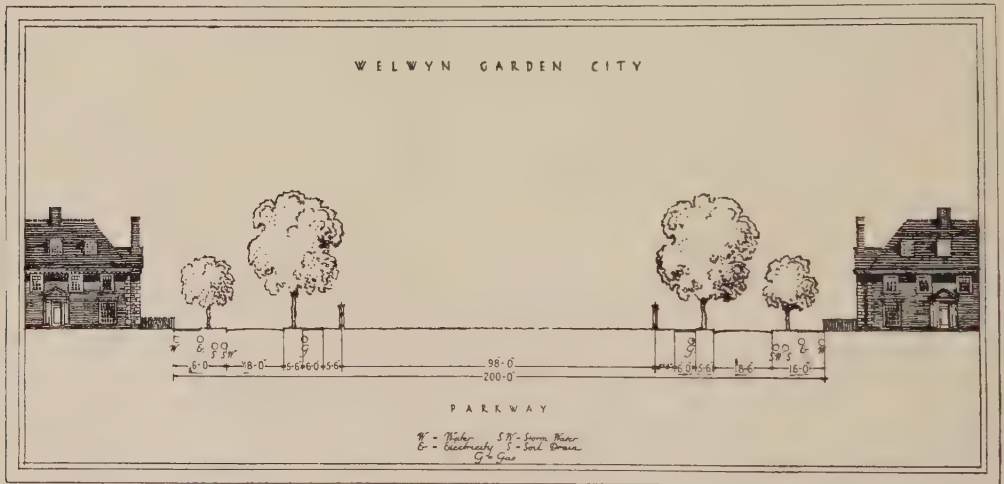
### ITS PUBLIC SERVICES

But certes seemed that city fair enow  
That spread our o'er the well-tilled vale below,  
Though no wise built like such as we had seen:  
Walled with white walls it was, and gardens green  
Were set between the houses everywhere.

WILLIAM MORRIS

#### § 1

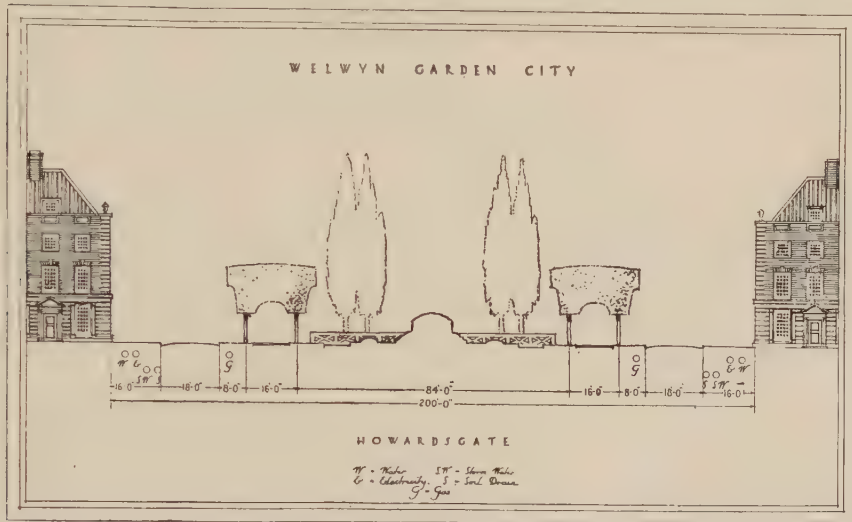
THE Welwyn Garden City estate in 1920 was as isolated a piece of country as could be found within twenty miles of London. There were few roads and no other public services whatsoever. The garden city company had therefore to provide everything from the start, though it had no statutory powers of any kind, apart from the ordinary



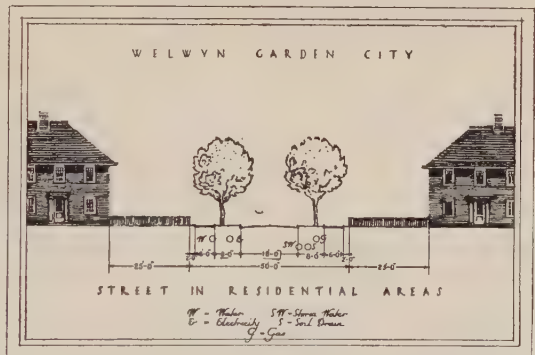
powers of an owner of land in fee-simple. The importance of this fact must not be overlooked. All that the company could do was what any landowner could do with his property; otherwise it had no powers to lay out and construct roads or to supply services, or to do anything else. The company engaged the services of various consultants specializing in railway development, drainage, water, electricity, and gas supplies, and executed the work under the supervision of its own engineering staff, so far as it carried out works. A civil engineer was placed at the head of the engineering staff, and an electrical engineer was appointed for the electricity undertaking. The highways were planned and constructed by the company's own architectural and engineering staff.

The only original metalled road of any importance was Handside Lane, which ran

through the south-western part of the estate for a distance of just over a mile and joined the Great North Road at an acute angle and on a sharp gradient. The road was maintained by the county council and had a carriage-way of about ten feet. It terminated



on the north in Handside village, where it joined another public highway now called Brockwood Lane and Bridge Road. This latter road ran from the Great North Road across the estate from west to east, where it joined another metalled road off the estate; it had a width of about seven feet, and though it had been metalled to a certain extent for part of its length, it had not been made up for ordinary traffic, and was used as a light cart track only. To enable Handside Lane to be used the company endeavoured to get the county council to strengthen and widen it, which the county authority was slow to do, with the result that the company, in its own interests, had to spend considerable sums upon the road to make it usable. After building had taken place, this road was widened and surfaced by the county council to a width of eighteen feet over the greater part of its length and a footpath constructed, the land for widening, where necessary, being given by the garden city company. Brockwood Lane and Bridge Road were slightly diverted and made up by the garden city company, the rural district council contributing some part of the cost to the construction of the Bridge Road section on the condition that the maintenance was taken over by the county council. The first important new road to be constructed by the company was High Oaks Road,





which was followed by Valley Road, which runs from the Great North Road to the junction of Bridge Road and Brockwood Lane. This road became the centre of development, and other roads were taken off it on both sides to complete the development of the area.



The presence on the estate of large deposits of flint-stones and gravel caused the company to adopt the policy of making roads with this material, which is very generally used in the district.

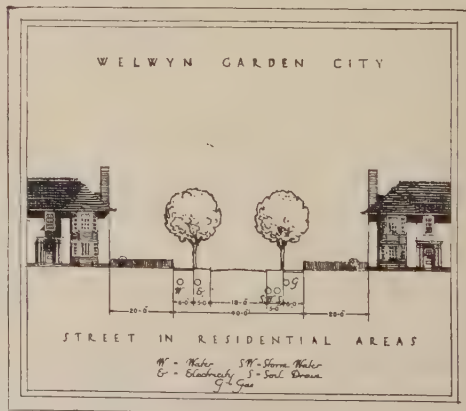
The widths of the roads vary according to their use. Parkway is 200 feet wide, with two carriage-ways 18 feet wide and a strip of park or garden in the centre 132 feet wide. The normal type of through road is 50 to 60 feet between boundaries, with a carriage-way of 18 or 21 feet. Other roads are 40 to 50 feet between boundaries, with carriage-ways of 18 or 15 feet. The question of future traffic requirements was considered, and

it was believed that the widths of roads allowed for growth of motor traffic, which has been greater, however, than had been anticipated. It can hardly be said that modern traffic problems have been overcome in the town. Through roads were originally constructed of a total thickness of 15 inches, composed as follows:

Sub-grade of fine screened gravel	4 inches thick
Hardcore of heavy flints	7 " "
Metalling of flint gravel	4 " "

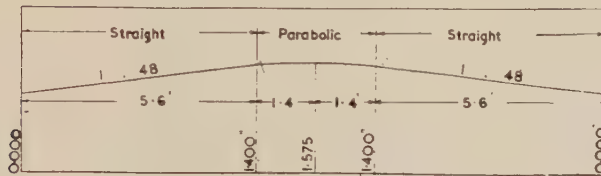
The lighter roads in culs-de-sac, etc., varied from 8 to 10 feet in width, with turning-points of larger diameter, and were constructed of the same materials as the other roads, but 8 inches in thickness.

After the war, in 1945, the company suggested to the urban district council that future roads should be made of concrete instead of gravel. There was some criticism of this suggestion, as with few exceptions gravel road construction had been carried out throughout the town, but the pits having been worked out it was increasingly difficult to obtain stone of the right size and consistency from outside sources. It was found that concrete roads could be constructed as cheaply as gravel roads, with a considerable saving in annual maintenance both to the company and to the council. The company was faced with the fact that

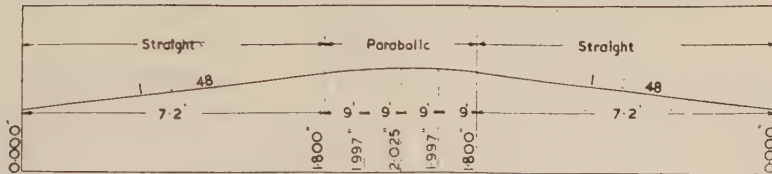


for the ten years 1929-39 its average expenditure on road maintenance had amounted to £884 per annum, which during the war fell to an average of £760 per annum, but the figure had risen since the war to £1,678, due to the increase in the cost of materials and wages, and to damage by snow and frost. The council was also faced with expenditure for tar spraying after the gravel roads had been surfaced with tar-macadam.

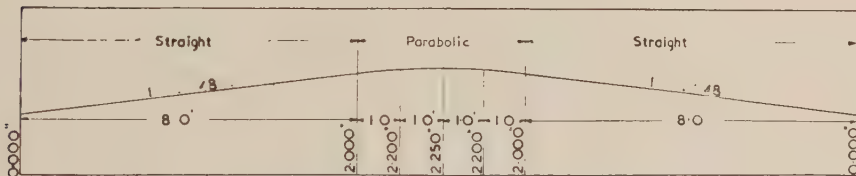
### TYPICAL CROSS SECTION



PROFILE OF 14'0" CARRIAGEWAY



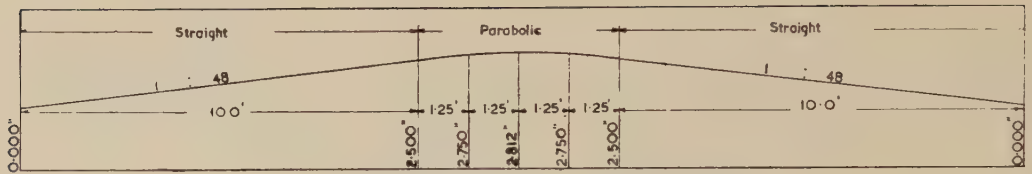
PROFILE OF 18'0" CARRIAGEWAY



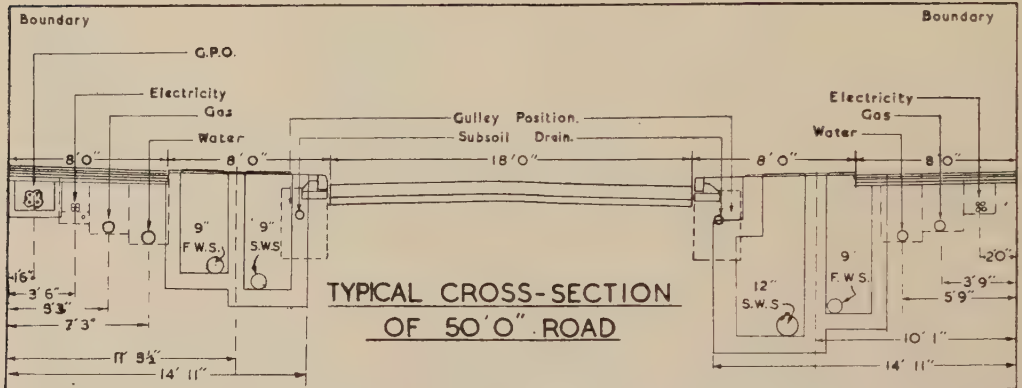
PROFILE OF 20'0" CARRIAGEWAY

It was not disputed that this expense would be avoided by the construction of concrete roads, and it was agreed to adopt the method. Within one year after the concrete is laid the council covers the roads with a thin asphalt carpet, which should last a considerable period without further attention.

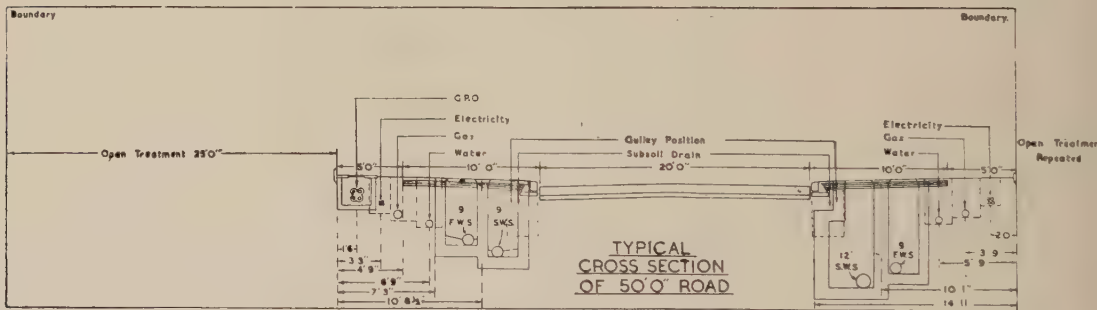
One of the main objections to concrete roads for town development has been the number of crossings required for public services, but by the adoption of duplicate services on each side of the road crossings are reduced to a minimum. The drawing on page 301 shows the method of connecting the services to various types of development. All the authorities responsible for the various services referred to on this plan were consulted and accepted the method.



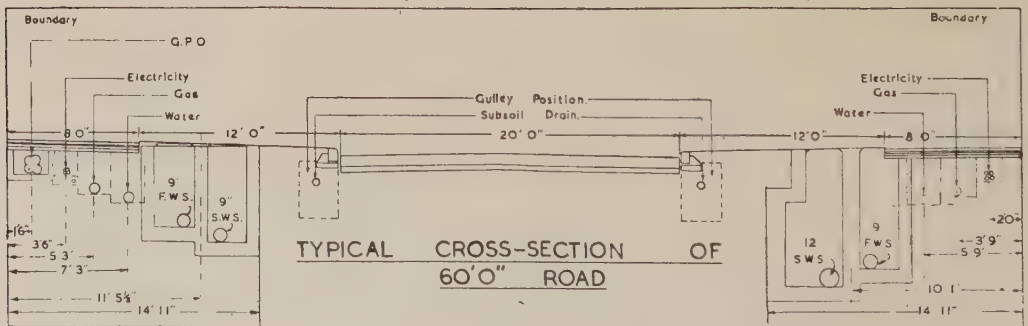
PROFILE OF 25' O" CARRIAGEWAY



TYPICAL CROSS-SECTION OF 50' O" ROAD



TYPICAL CROSS-SECTION OF 50' O" ROAD



TYPICAL CROSS-SECTION OF 60' O" ROAD



# PLATE XVII

These three pictures show early examples of Welwyn Garden City domestic architecture, all by Louis de Soissons.

The front of a house on Guessens Road (1922).



Part of a group on Valley Road (1925), when first built.



Bridge Road (1931), when first



PLATE XVIII



Guessens Walk (1927).

*Louis de Soissons, Architect*

A house at the end of Brockwood Lane (1926).

*C. H. James, Architect*



Part of a group of houses on Parkway (1932).

*Louis de Soissons, Architect*





# PLATE XIX

Examples of treatment of small  
greens.

(a) Entrance to the Orchard (1927).



(b) Parkway Close (1925).

(c) Meadow Green (1921).







Examples of Welwyn Garden City street tree planting.

(a) Parkway (1925).

(b) Walden Road (1927) photographed in 1947.



(c) Peartree Lane (1927).



(d) Peartree Court, built by public utility society (1927).



(e) Coneydale, a builder's scheme (1934).



# PLATE XXI

Early development of individual houses on High Oaks Road before footpaths were constructed (1921).



At the end of Brockwood Lane (1921).

*Louis de Soissons, Architect*

Handside Close as first laid out (1922).



*Louis de Soissons, Architect*



Gardening class (1924).





The first close at Handside Green (1921).



Homer Field, a close off Russellcroft Road, as first laid out (1924).

*Louis de Soissons and Arthur W. Kenyon, Architects*



Early building off Meadow Green (1922).

*Clapham Lander, Architect*



Later development at Goose Acre (1938).





Part of the residential flats on the roof of Welwyn Stores (1939).

*Louis de Soissons, Architect*



Building in the woodlands before the war, in 1938; Mandeville Rise.



Street tree planting in Knella Road; note the position of the street lamp standard, placed without regard for the trees.



The first housing scheme by the rural district council as it appeared when first built (1922).

*Louis de Soissons, Architect*



Shortlands Green, the urban district council's sixth scheme (1931).

*Louis de Soissons, Architect*



Upperfield Road, one of the urban district council's housing schemes (1939).

*C. W. Fox, Architect*



The Roman Catholic Church of  
St. Bonaventure (1926).

*T. H. B. Scott, Architect*



The Anglican Church of St.  
Francis (1935).

*Louis de Soissons, Architect*

The Free Church (Presbyterian),  
the first of the new churches (1929),  
as it appeared when first opened.

*Louis de Soissons, Architect*







Handside School, the first school;  
built in 1923, added to in 1932.



Sherrards Park School (1929-30).

*C. Murray Hennell and H. T. B.  
Barnard, Architects*



The grammar school, built by the  
county education authority  
1937.

The community centre built at  
Leamington by the urban district  
council in 1938.

*Louis de Soissons, Architect*







nt of the early residential development of Welwyn Garden City. At the bottom left-hand corner is a small section of Park  
y, with Guessens Road parallel to it; bending to the right it joins Handside Lane, becomes Youngs Rise, meets Elm Gar  
es, runs into Valley Road, and continues as High Oaks Road. At the right-hand bottom corner is part of the railway line  
Dunstable, and more or less parallel with it Bridge Road and Brockswood Lane. All this development was done between  
10 and 1928. In the top right-hand corner is the beginning of the golf course. This photograph corresponds with part of  
area shown in the plans on pages 234-7. If the plan on page 237 be turned W./E. the roads can be distinguished, and we  
something of the difference between the abstract plan and reality.



## PLATE XXVII

The urban district council's office  
(1936) when they were opened  
with some of the woodland. The  
first building on the Campus.

*C. G. Elsom and H. St. John  
Architects*





The Cherry Tree Restaurant as first constructed in 1921.



The Cherry Tree Restaurant rebuilt in 1933.



The Beehive public-house at Hatfield Hyde, an example of the original buildings on the estate; the rustic porch and the extension on the left were additions made many years ago.



# PLATE XXIX

The original Welwyn Stores as it was in 1924.



The Welwyn Stores, grocery and provisions departments, in 1924.

The main entrance to the Welwyn Stores new building in 1939.

*Louis de Soissons, Architect*



Shops at Cole Green Lane (1938).





The Welwyn Theatre, Parkway (1928).

*Louis de Soissons and A. W. Kenyon, Architects*



The first building, Barclays Bank, in the north of Howardsgate (1930), showing the style the road was intended to have.



The post office, adjoining Barclays Bank, showing how the architectural scheme was departed from (1931).



The south of Howardsgate, with the Midland Bank (1929) balancing the bank on the other side and showing the change of architectural treatment. The first block of shops has offices on the first and second floors, the other has flats (1929 and 1930).





Where the residential area adjoins the industrial area. At the left-hand corner are sectional factories on Bridge Road East. Ravenfield Road and Peartree Lane are in the foreground. Ludwick Way runs across to the right. A view taken at an early stage (1936).



## PLATE XXXI

One of Murphy Radio factories on Broadwater Road (1931).

Group of sectional factories, in Road (1936).







A two-storey sectional factory  
Broadwater Road (1931).



Norton Grinding Wheel factory  
on Bridge Road (1931).



The Welgar Shredded Wheat  
factory; the silos are a well-known  
landmark (1924).



Roche Products factory, Broad-  
water Road (1938).





Monks Wood in Digswell Park in  
the rural belt.



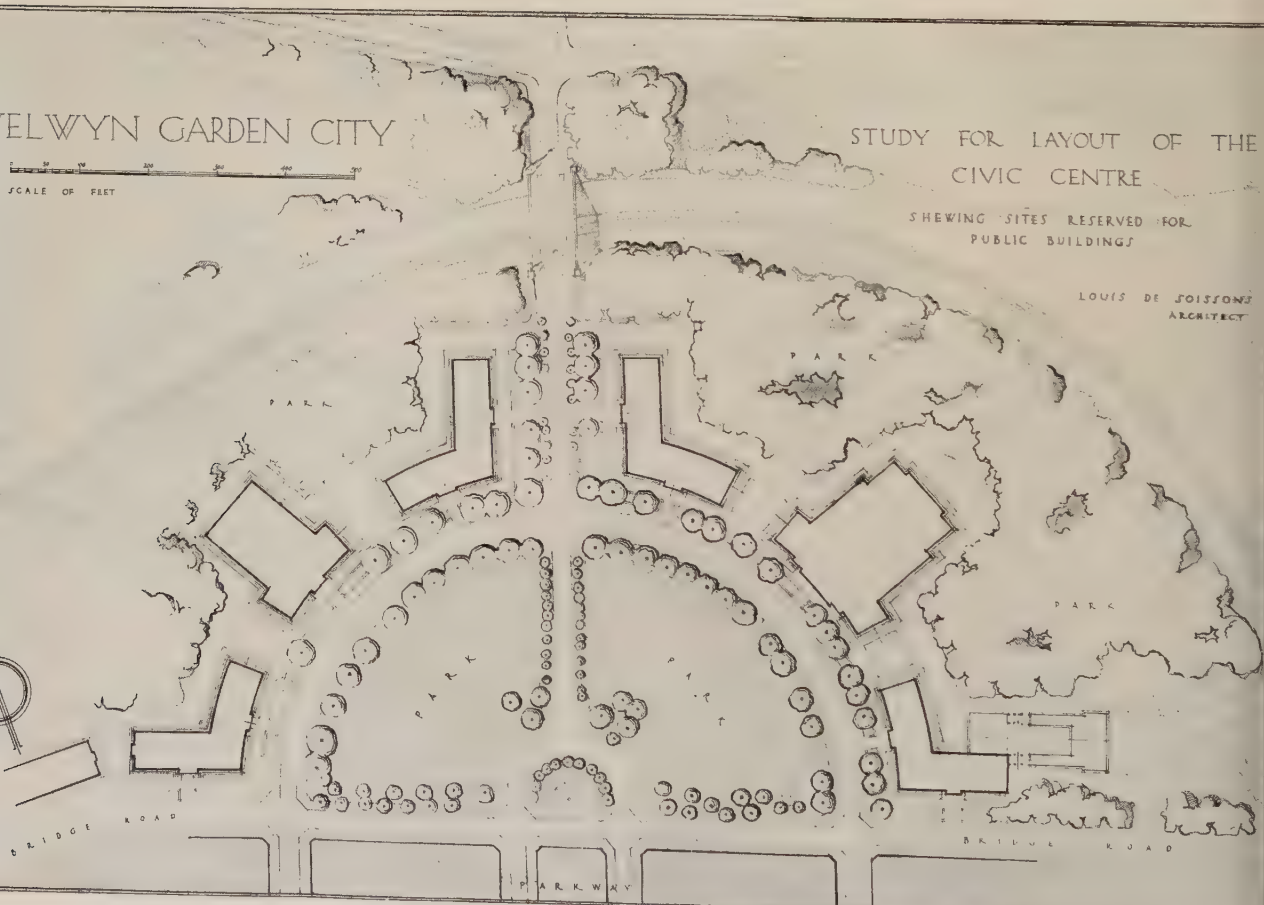
The river Minram.





Howardsgate as originally planned.

*Louis de Soissons, Architect*



Sketch for the Campus and Civic Centre made in 1921. Part of the Campus was laid out in 1939, after the district council offices, the first building on the right, had been built.

*Louis de Soissons, Architect*



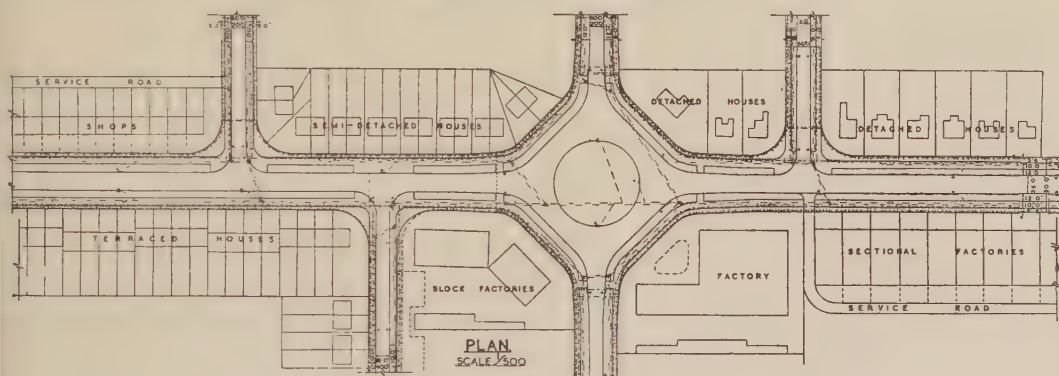
The lengths of roads constructed for the first five years were as follows:

				<i>Main Roads</i>	<i>Lighter Roads</i>
				<i>Lin. yds.</i>	<i>Lin. yds.</i>
Year ended 31st March 1921	.	.	.	650	190
" " 1922	.	.	.	330	490
" " 1923	.	.	.	2,740	Nil
" " 1924	.	.	.	1,590	770
" " 1925	.	.	.	3,360	870

The yearly figures do not appear to have been maintained, but the total area of new roads constructed up to 1947 is 33,507 lin. yards of main roads and 7,078 lin. yards of closes, etc.

In considering the figures of road construction for the first few years, which will strike

#### TYPICAL PLAN & SECTIONS INDICATING SERVICES.



the reader as very small, it has to be remembered that what was done was limited by the company's resources. This meant that in the early years roads were made too slowly and remained for too long at a low standard of completion, so that mud was ubiquitous in wet weather, for the traffic was far too heavy for the roads to be kept in reasonably good condition. There were no kerbs to the roads, no paved paths for pedestrians, and the inability to get about the town in comfort except in fine weather was an inconvenience that the early residents bore, sustained by hope for the future. Their patience was rewarded, but the handicap of bad roads for so long a period was a serious one, and did not aid the company in its task. That this increased the pioneering experience of those who took part in the early years of the garden city there is no doubt, and a certain element of roughing it in the inception of such a building project was inevitable; but much of it could have been avoided had the company possessed the resources to do what it knew to be necessary. Roads are a dead cost and their maintenance is heavy, so that economies of the most rigid kind were enforced.

The liability for maintenance of roads depends upon the status of the road, that is, upon whether it is a district road, the charge for maintaining which falls upon the rural district,

a county road, the maintenance of which falls upon the county rate, or a private road, the maintenance of which has to be undertaken by those whose property it serves, at Welwyn Garden City by the company, and charged out (if at all) in accordance with the covenants in the leases granted. The company, however, made no charge for road maintenance, and to avoid such charges being made, the incidence of which is often unfair and inequitable, and to provide for the maintenance of the roads up to a reasonably high standard, an arrangement was made with the rural district council, acting through the Welwyn Garden City Parochial Committee, to take over new roads and maintain them, the cost falling upon the Welwyn Garden City parish only. The parish was made a 'contributory parish or place' for this purpose, being relieved of all charges for road maintenance in respect of other district roads, and bearing entirely the expense of maintenance of its own roads, apart from roads maintained by the county council. The position established at Welwyn Garden City was unusual, and was made possible by reason of the provisions of the Private Street Works Act, 1928 (ss. 4 and 15). It was as follows:

(a) All new roads to be constructed on a specification and to a width agreed by the surveyor to the county council.

(b) These new roads, with the footpaths and verges thereon, to be taken over by the district council as soon as

(i) such roads are completed, and

(ii) buildings have been erected on the sites fronting on such roads.

(c) The district council to undertake the necessary road surfacing and tar-paving of paths, and to charge the cost on the parish as a special highways area, borrowing the money for a period of five years.

(d) The county council to take over from the district council all main roads, the expense of which will then fall upon the county as a whole; or, alternatively, to make grants to the district council out of the county funds for the maintenance of such roads.

The arrangement was continued with the urban district council and remained in force until 1938, when a new procedure was agreed to under which the council undertook to complete residential roads while the company agreed to complete all roads not wholly residential. From April 1946 the garden city company agreed to complete all roads and to hand them over without any charge for completion falling upon the rates.

In the early years this rather unusual arrangement was of distinct advantage to the town and its inhabitants, for under it the roads were completed earlier than is usual on new estates, and no charges fell upon the lessees. As practically all new residents were in occupation of houses on new roads and would have been liable for road-making charges, there was no injustice in the arrangement, as all benefited, although, of course, there was most benefit to the garden city company itself. Possibly the arrangement was continued beyond the time when it should have been discontinued. It was carried out originally on the company's initiative and on grounds that all who considered them agreed to be reasonable; but when the town was established the benefit became

one-sided, for the company secured the advantage of neither having to complete the roads nor to have the cost falling upon its lessees, and the justification for the charges continuing to fall upon the ratepayers at large was not evident.

## § 2

Most of the roads were laid out with grass verges, and the maintenance of these verges proved in some places to be a matter of difficulty. The district council undertook the maintenance on all roads taken over by them, including also the county roads, the verges on which the county council did not maintain. The methods adopted to maintain them were from the start:

(a) To keep grass verges in proper order, as the better the verges are kept, the easier it is to secure their being respected by the public.

(b) They are regularly mown, and, when necessary, weeded.

(c) Notices are put up at a few points asking the public to refrain from walking on the grass.

(d) The attention of the public is periodically drawn in the local press to the fact that the prevention of damage to the grass verges improves the appearance of the town.

(e) Periodical instruction is given in the matter in the schools.

(f) Employers of labour have been asked to instruct their employees to keep carts and other vehicles off the verges, and to refrain from using them as footpaths.

The verges at street corners are the most troublesome to maintain, because of the tendency to take short cuts across them; at these points the paths are made to take the line of a probable short cut, or alternatively low-growing shrubs are planted to prevent a path from being made.

In some places, particularly where traffic is heavy, grass verges cannot be maintained, and there the whole of the area is made hard. The diversion of roads and footpaths to make for improved access and to conform with the town-plan has had to be undertaken, but as in every case it has been easy to show that the diversions have been to the public interest, no difficulties have arisen.

During the war, the influx of people with no interest in the town caused the maintenance of verges to be less easy than before, and, in fact, the war stopped the cutting of grass and other necessary work.

## § 3

The questions of road widths and the general design of the road system have been debated at various times, and dissatisfaction is constantly expressed that the roads continue to be made too narrow and that there are too many dangerous traffic corners. Apart from the twin roads of Parkway and Howardsgate, the Welwyn Garden City road system, as the writer has already remarked, lacks special modern treatment. The roads curve in the usual picturesque style, though without sacrifice of straightforward treatment



as a whole, but road junctions are not well thought out and motorists complain of blind corners. The major defects of the road plan are the four bridges over the main line railway, none of which is adequate, and although two of the bridges have been slightly widened by adding footways to the original roadway, this has not remedied their inadequacy or the dangers they present to traffic; both need drastic rebuilding, which is long overdue. A bridge constructed by the company with financial assistance from the county council, the district council, and the railway company over the Luton branch line is an example of what should be done. It is of ample width and was one of the town's early, and still remains one of its best, architectural features. Another bridge under the Hertford branch line is not on the same level of achievement. The reduction of Parkway to a single road at the junction with Barleycroft Road was an unfortunate departure from the town-plan and has not improved its road structure. Improvement of road access to the north is now a matter of urgency.

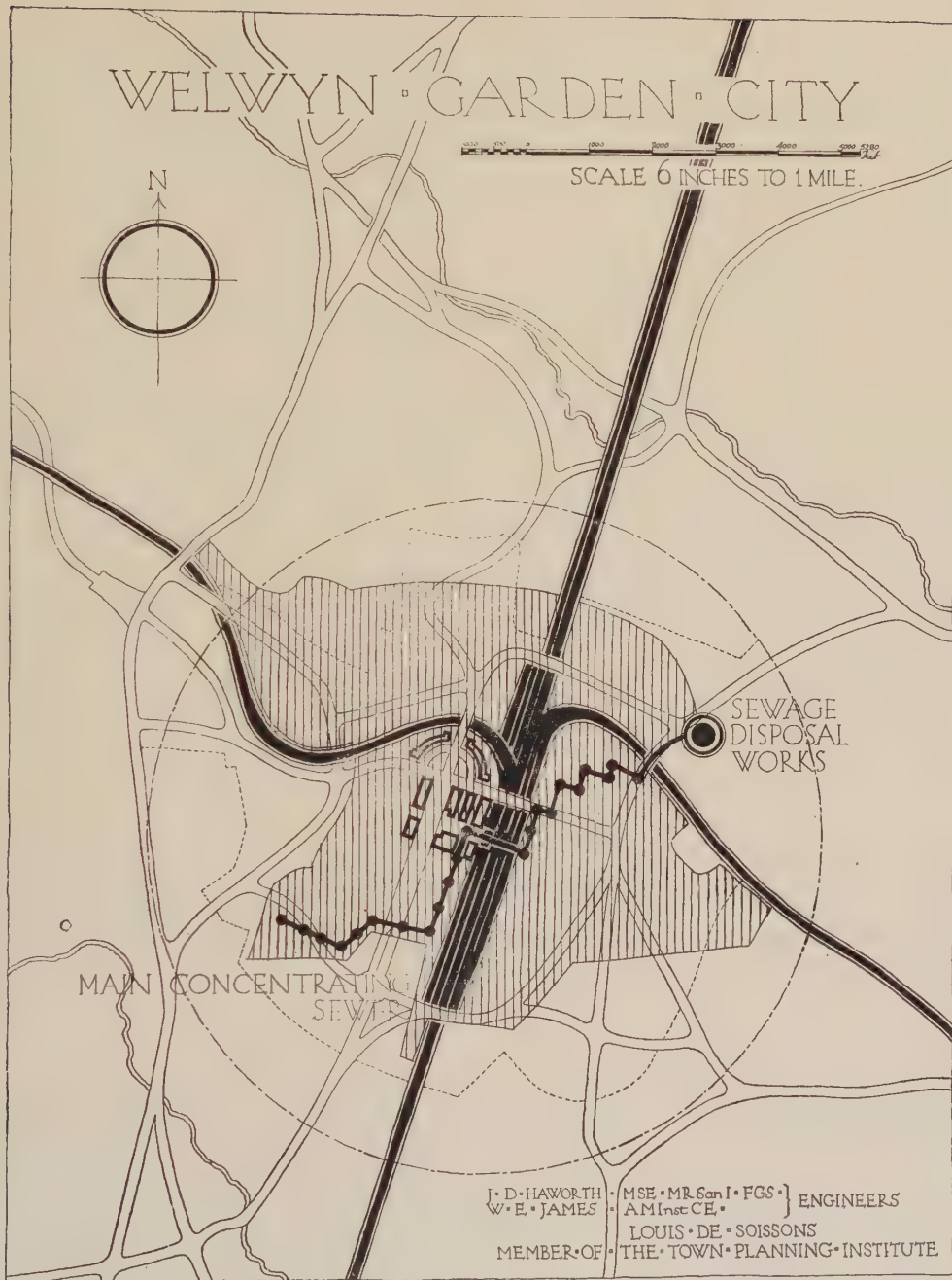
#### § 4

The question of sewage disposal gave the directors of the company much anxiety, owing to the existence of the Lee Conservancy Act, which prohibits the discharge of sewage effluent into the rivers Lee and Mimram, between which the estate lies. The problem was extraordinarily difficult and was only overcome by some ingenuity and at a good deal of expense. The Lee Conservancy Act is undoubtedly obsolete. It was passed at a time before modern methods of treatment of sewage existed, and the revision of its provisions is overdue. This affects not Welwyn Garden City alone but all towns in the Lee Valley. The main drainage of the valley throughout is a matter that requires action on a regional level, but there is no authority to handle it.

The town is sewered on the 'separate' system—that is to say, the whole dry-weather flow is carried by one system of sewers to the sewage disposal works, while an entirely separate system collects all surface water due to rainfall and ultimately discharges it in the river valleys. Two alternative disposal areas were considered as practicable, and an area to the north-east of the estate to which a large part of the area could be drained by gravitation was finally selected. For the first steps of development two temporary disposal works were made to deal with the sewage from a population of 2,000, the main drainage system not being constructed until 1923.

The whole of the main sewer carrying the foul water flow was then completed. It is nearly 3,000 yards in length and traverses the site of the town from south-west to north-east, passing through the town centre and crossing under two railways and ultimately discharging into the disposal works.

The first units of the permanent sewage disposal works were designed for a population of 5,000. They were constructed on the bacterial system with continuous flow-settlement tanks and percolating filters with revolving sprinklers governed by dosing tanks controlled by automatic siphons, the purified effluent being distributed



MAIN DRAINAGE SCHEME AS ORIGINALLY DESIGNED

The hatched portion shows the gravitation area. Outside this area to the south the sewage is raised to the main concentrating sewer.

over gravel lands below the works, with an outfall pipe for conveying the effluent to the Mimram. Owing to the increase of population and particularly of industrial wastes, the works are heavily overloaded.

The following are the lengths of sewers laid during the first five years:

				<i>Foul Water Sewers Lin. yds.</i>	<i>Surface Water Drains Lin. yds.</i>
Year ended 31st March	1921	.	.	2,240	660
"	"	1922	.	580	1,090
"	"	1923	.	2,210	1,080
"	"	1924	.	5,300	3,350
"	"	1925	.	3,760	2,990

The records have not since been maintained, but the total length at 1947 is approximately 44,000 lin. yards of foul-water sewers and 32,000 lin. yards of surface-water sewers.

The company constructed and carried out the sewage disposal scheme without statutory powers and entirely on its own account. The plans and estimates for the works were submitted for approval to the Ministry of Health under the provisions of the statutes under which loans were advanced to the company, and the approval of the ministry was given. The expense of sewage disposal was payable by the lessees under the terms of the company's leases, until the local authority took responsibility, but the company made no charge. The sewage disposal works and main sewers were taken over by the local authority in 1932. The council paid the company the sum of £34,080 in respect of this transfer, a transaction that deserves to be placed upon record.

## § 5

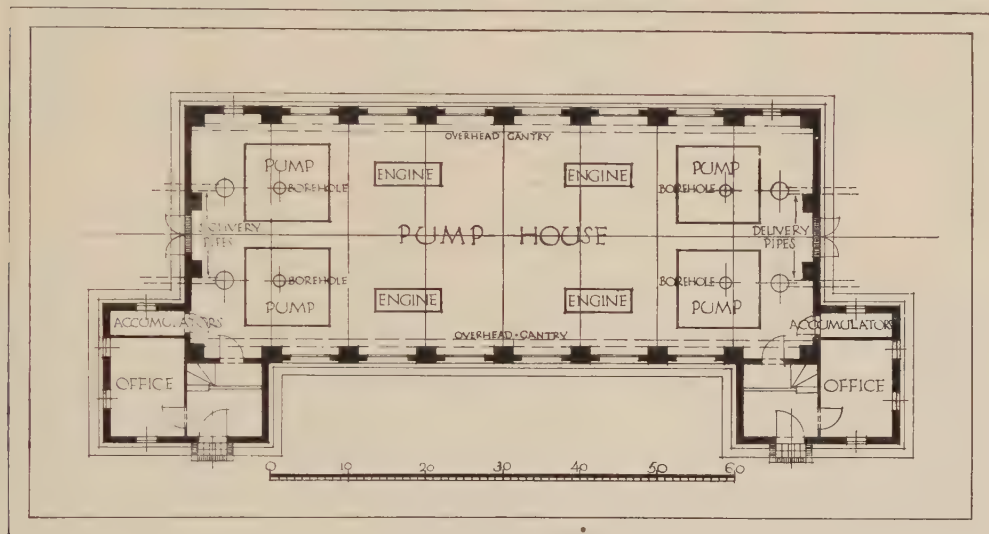
A burial-ground of two acres was provided on the south-eastern boundary of the parish by the parish council, under the Burial Acts, which ultimately became the responsibility of the urban district council. There is land available for extensions, and the present area is  $3\frac{1}{2}$  acres.

## § 6

The water supply was established by the company as part of its general undertaking. A plentiful supply of water of the highest degree of organic and bacterial purity was proved in the valley of the river Mimram and within the boundaries of the estate, but for a little more than three years the company supplied the town by temporary pumps from a deep well situated nearer the centre of population at Handside. This enabled an immediate supply to be given at relatively small cost. The first unit of the permanent pumping plant had two bore-hole pumps, each capable of raising 16,000 gallons per hour to the reservoirs. The pumps were driven by two engines, each of forty-five brake horse-power, running on oil fuel. The plant was in duplicate, and one set was held in reserve so as to ensure the continuity of supply in case of breakdown. The first section



of the permanent reservoirs, erected near the highest point in Sherrard's Wood, comprised two units with a total capacity of 300,000 gallons. These were constructed, side by side, of mass concrete with flat roofs of reinforced concrete carried on pillars. The pumping station was connected with the reservoirs, some 2,000 yards distant, by a 15-inch rising main, and a delivery main of the same diameter carried the water from the



WELWYN GARDEN CITY PUMPING STATION AS ORIGINALLY DESIGNED

*J. D. Haworth, Engineer; Louis de Soissons, Architect.*

reservoirs to the centre of the town, whence it was distributed by smaller mains. Both the pumping station and the reservoirs were arranged for extension as the population grew, which has taken place from time to time. As part of the consideration when the sewerage system was taken over and paid for by the urban district, the water supply was also transferred to the council, and is now run as one of the town's profitable assets.

## § 7

The garden city company gave early consideration to the question of gas supply. Notwithstanding the statutory powers of the existing gas companies, the company could have constructed works upon its own estate, but after going into the matter exhaustively it was decided to endeavour to get a supply from the neighbouring old-established gas companies within whose areas the estate came. It was not, however, without considerable difficulty that the supply was secured, and had it not been for the financial stringency from which the company suffered, the town would have had its own independent supply. The position was peculiar. The part of the estate in which development was started was within the area of the Hatfield Gas Company; but the works of the

Welwyn Gas Company were nearer the site; a large part of the land which was subsequently to be developed was within the Welwyn company's area; both were small companies. After the development of the town had proceeded to a certain extent the two gas companies decided to act together to give a supply, Welwyn bringing a main from its works to the boundary of its area, Hatfield continuing the supply from that point. This was done on the garden city company giving a guarantee to the gas company of a reasonable return on the capital expenditure involved. The two companies later combined and were afterwards absorbed by the Watford and St. Albans Gas Company, which is itself about to be subject to the process of absorption in the nationalized gas system.

## § 8

The estate was in the area of the North Metropolitan Electric Power Supply Co., and the garden city company proposed, as an alternative to setting up a supply station itself, to make an arrangement for a supply in bulk from the statutory company, whose nearest station was at Hertford, nine miles away. After what can only be described as strong persuasion the statutory company was induced to lay a high-tension main from Hertford to the estate, the garden city company guaranteeing a minimum revenue of £1,200 per annum and undertaking the distribution throughout the estate. The garden city company then formed a subsidiary company under the name of the Welwyn Garden City Electricity Supply Co. Ltd., to take over the supply in the town, and this company was granted a provisional order giving it statutory powers. The bulk supply was, of course, interconnected with the North Metropolitan Electricity Supply Co.'s other stations. The supply is taken to the main transformer station at 33,000 volts, where it is converted by static transformers to 3,000 volts. Transmission through the town is mainly at 3,000 volts to sub-stations, where the current is transformed to 415 volts, 3-phase 4-wire current for power and 240 volts single phase for lighting and domestic purposes. All buildings in the town have a supply available, and practically all are connected. The electricity company encouraged from the start the use of electricity for domestic cooking and other purposes. The progress of the electricity undertaking is shown in the following table.

<i>Year</i>	<i>Total Miles of Cable laid</i>	<i>Units Sold in Each Year</i>	<i>Number of Consumers</i>
1921	4½	6,655	109
1922	9½	57,568	308
1923	15½	169,466	459
1924	22½	265,210	661
1925	No Record	430,424	912
1926	„	1,001,423	1,349
1927	„	1,598,066	1,757
1928	„	2,317,076	1,876
1929	24½	3,085,257	2,078

<i>Year</i>	<i>Total Miles of Cable laid</i>	<i>Units Sold in Each Year</i>	<i>Number of Consumers</i>
1930	27½	4,101,688	2,413
1931	28½	5,389,756	2,526
1932	29½	6,195,846	2,546
1933	32	6,999,990	2,628
1934	33	7,293,831	2,824
1935	34	8,224,017	2,988
1936	39½	9,346,526	3,267
1937	45½	11,362,319	3,644
1938	51	13,584,876	4,033
1939	56½	16,524,924	4,373
1940	59	20,613,853	4,638
1941	60½	27,038,343	4,645
1942	61½	29,036,727	4,674
1943	61½	28,436,165	4,712
1944	61½	29,886,794	4,738
1945	61½	30,359,340	4,737
1946	64	33,319,372	4,807
1947	64½	32,152,687	4,908

Industrial consumption of electricity was, of course, small in the first few years, but since 1937 the progress was rather astounding, and in the year ending 31st December 1946 no less than 33,319,372 units were sold, of which 18,641,583 were for industrial and commercial purposes. The distribution was as follows;

<i>Year</i>	<i>Domestic Consumers</i>	<i>Industrial and Commercial</i>	<i>Total</i>
1929	1,997	81	2,078
1937	3,437	207	3,644
1946	4,505	302	4,807
1947	4,598	310	4,908

It will be fairly obvious that the growth in consumption for industrial use may bear no direct comparison with the number of consumers connected, as a single large factory may use as much as ten smaller but no less important concerns. On the other hand the domestic consumers do not show such a variation and the progress in electrical development can be demonstrated by examining the number of units consumed by them:

<i>Year</i>	<i>Total Units sold for Domestic Purposes (Thousands)</i>	<i>No. of Consumers connected</i>	<i>Average Units per Customer (Per Annum)</i>
1929	1,278	1,997	640
1937	4,993	3,437	1,452
1946	14,532	4,505	3,225
1947	15,253	4,598	3,340

The company adopted an enterprising policy and was among the first in the country to adopt a two-part tariff, under which, after paying a fixed quarterly or weekly charge, the electricity used could be charged at a low unit rate. The two-part tariff, which is now in common use throughout the country, works in the following way: To supply the 4,500



dwelling in the town the company had to lay over forty miles of cables, and the amount of capital expenditure was over £200,000. A return has to be paid on this capital and a reserve created to replace the transformers, mains, and meters that fail or become obsolete, also a staff of engineers and workmen has to be employed to maintain the system in running condition. These charges have to be met whether consumers use much or little electricity, and, therefore, if the company can recover these costs by means of a fixed quarterly or weekly contribution, the consumers need pay only a small extra charge for the electricity used. On such principles, the more electricity used the cheaper the average unit becomes.

The following figures show how the average price per unit for domestic purposes has fallen in the town since 1929.

<i>Year</i>	<i>Units sold per Domestic Consumer</i>	<i>Average Price paid</i>
1929	640	2.32 pence
1937	1,452	1.06 „
1946	3,225	0.90 „
1947	3,340	0.95 „

From the Electricity Commissioner's statistics relating to the seven years 1938-42 inclusive, it appears that in 1942 the average price for power for lighting in Welwyn Garden City was 25 per cent less than that of any other company undertaking in England and Wales. Of the 4,505 domestic consumers connected at the end of 1946 no less than 2,943, or 65.3 per cent, were cooking by electricity; 2,624 consumers, or 58.2 per cent, were using electricity for water heating (excluding electric kettles), and 1,498, or 33.2 per cent, were using wash-boilers.

As the electricity supply has now passed into public ownership, the garden city company's interest in it has ceased; the company has however, formed a new company, Welwyn Electricity Installations Ltd., to continue the work previously carried out by the electricity company in connection with the installation and maintenance of services.

### § 9

The nearest railway stations to the centre of the estate were Hatfield  $2\frac{1}{4}$  miles, Welwyn  $1\frac{1}{2}$  miles, Cole Green 3 miles, Ayot 1 mile. None of these stations was of any use for the development of the town, and the railway company had to be induced to open a new station. This took many months of negotiation; at last a temporary halt was opened on the Luton-Dunstable branch line, the site of a permanent station on the main line was agreed upon, and an area of 69 acres was purchased for future railway works at the original cost of the land to the garden city company! The estate is at a strategic point for railway development, the land in the centre being level and the two branch lines to the east and west joining the main line at the centre and running parallel with it to Hatfield Junction, three miles away. By making a junction at Welwyn Garden City considerable economies in railway working were indicated, especially as the junction at Hatfield was congested and traffic was being handled there with increasing difficulty.

The construction of the junction, however, was not put in hand until the recent war. Though the railway company was, to put it mildly, unenterprising and uninterested in the new town's possibilities, it was got to improve the service to meet the needs of workmen travelling to the estate, and the needs of residents who travelled to London daily. It is interesting, perhaps, to note that the railway company was unable to give a service to meet the convenience of people visiting the estate, with the result that the company was, for a time, forced to run a bus service to the town at week-ends, and for five years and more visitors who travelled in the forenoon or early afternoon and returned in the late afternoon had a poor impression of the railway facilities.

The position of the temporary station on the branch line was a bad one from any other point of view than that of the railway company, for access to it was awkward and it was necessary to change at Hatfield by nearly all trains. After the main line station was built, however, the town enjoyed a good service of fast trains to London, Hitchin, Letchworth, and Cambridge, the journey to London taking twenty-seven minutes and from London twenty-three minutes. The war put an end to this, and the service has deteriorated considerably. During the war and since the incoming passenger traffic greatly increased, owing largely to the housing shortage. Large numbers of Welwyn Garden City workers live in London and come to the town daily to work. The influx from surrounding towns and villages is considerable too, and a special late afternoon train had to be put on from Welwyn Garden City to take workers into London. The facilities at the railway station do not include a refreshment room, and the waiting rooms are of the usual uncomfortable type. There is a private kiosk for the sale of tobacco and cigarettes but otherwise no amenities. The railway company did, however, erect a number of its large standard poster display boards on the platforms, which made the town appear as though it suffered the same infliction from advertisement hoardings as other towns, though, apart from the railway, it did not. There was set up a joint committee of the railway company, the garden city company, and the district council to consider improvements in the station and the goods yard from the amenity point of view, but as discussion upon the train service, punctuality, cleanliness, and similar matters was not permitted, it is not surprising that nothing useful was done. A new style of lettering for use on stations throughout the system was tried out at Welwyn Garden City station in 1946, influenced, apparently, by the garden city company's early practice in lettering used for public notices.

The following statistics of railway traffic at Welwyn Garden City in the first five years indicate the growth of the place:

<i>Season Ticket Holders</i>				<i>Passenger Traffic</i>			
1st Jan. 1921	.	.	20	1921	.	.	2,000 per week
1st Jan. 1922	.	.	85	1922	.	.	2,500 „
1st Jan. 1923	.	.	157	1923	.	.	4,000 „
1st Jan. 1924	.	.	290	1924	.	.	8,000 „
1st Jan. 1925	.	.	410	1925	.	.	9,000 „

The town is connected by motor-omnibus service with the towns in the surrounding

district, and with London. These facilities did not exist when the town was started. They grew gradually. There is still, however, no internal bus service for the town, reliance having to be placed on the London passenger services passing through the town or making the town a terminus. Since these words were written, however, an extremely restricted internal bus service has started (June 1948).

### § 10

To facilitate the transport of building materials and to ease traffic on the newly made roads, the garden city company arranged for the construction of a special railway siding, which is connected with areas in which development is taking place by a light railway. The light railway was operated by a subsidiary company connected with the joinery works, building materials depot, and gravel and sand pits. Ten miles of light railway were in use, with nine locomotives and over five hundred wagons. The track was moved and relaid as development required, and all building sites were served. The light railway proved of immense value in the development of the town, making building largely independent of roads and protecting the new roads from excessive traffic. It ceased to be used in 1935 when by reason of the growth of the town it created more problems than it solved.

### § 11

The first works of development were undertaken by contract, but at an early stage the company considered the advisability of doing the work itself to control costs more effectively and to enable modifications to be made as work was being carried out. The building company already described was enlarged for this purpose, and all the constructional works of the company, including roads, bridges, laying of sewers and water mains, etc., were carried out by this company on detailed estimates agreed with the company's engineers. The exceptions to this are the execution of specialist work such as the sinking of bore-holes, the erection of machinery, etc. Had it been possible or desirable for the whole, or even a considerable section, of the road work and laying of mains, etc., to be designed in detail and carried out in definite sequence as part of a single contract or series of contracts put to open competitive tender, that no doubt would have been the course to adopt from an engineering point of view pure and simple. But unless building works were to be undertaken at the same time and on the same scale for the same areas, it would not have been economical to do it. The plans and schemes are got out for complete sections, but the work is actually carried out bit by bit as development is required, and often it is found convenient to vary the programme, to do one particular part of the work out of its turn, to hold up other work, and to make various other modifications. Under these circumstances ordinary competitive tender for the work would not have been possible, and the only feasible way of doing the work would have been on a schedule of prices. The company's system worked well, and, in the opinion



of the officials, reduced the total costs of the work done. An important advantage is that a large measure of continuity of employment was from the first secured for the workmen engaged, the work being carried out in accordance with a programme which aimed at such a result. The subject has already been mentioned when discussing the building company.

## § 12

On the inception of the scheme the company considered the possibility of establishing an internal telephone system for the town, as part of its normal public services; but nothing could be done owing to the rights of the Postmaster-General, who has a monopoly of the public telephone service. The ideal that was aimed at was to connect all houses to the telephone service as they were built in the same way as to water, gas, electricity, and other services. This was, however, not found practicable, but the number of post office telephones installed is above the average, being before the war one per twenty-three of the population.

## CHAPTER VI

### ITS AGRICULTURE

To bring about a high nobility in the national soul we must make harmony in its economic life, and the two main currents of economic energy—the agricultural and the urban—must be made to flow so that their action will not defeat each other. A. E., *The Natural Being*

#### § 1

WHEN the estate was purchased there were five agricultural tenancies, three residential tenancies, and a number of cottage tenancies. The whole of the land was in occupation with the exception of the woodland known as Sherrard's Park Wood. Two of the residential properties were held on long lease, but were in a position that did not interfere with development. The farms were on the usual annual tenancies. The south-west area of the estate, the most important for immediate development, was occupied by a farmer of advanced years (W. J. Horn) whose family had held the tenancy for several generations; he and his sons were exceptionally sympathetic towards the garden city company's scheme, and, in spite of the disturbance caused to them, gave the company every facility to proceed with its work. This was fortunate, as it prevented considerable delay. The company had a good deal of difficulty in getting possession of the land to the east of the estate, and the contour survey and much other work was in consequence held up for a long time. The areas of the farms and the original rentals are given below:

	<i>Acres</i>	<i>Rent</i>
		£
1	595	612
2	665	563
3	276	236
4	276	350
5	76	95

The land was mainly arable and on the whole well cultivated. As soon as it had secured the estate the garden city company had to consider what its agricultural policy was to be, for the development of the agricultural industry was a definite part of the scheme. The town-plan provided for an agricultural belt of 608 acres, which was too small; but it was considered likely that other land might become available at some future date, and for the time being, at any rate, the land to remain under cultivation was considerably more than the ultimate 'belt.' The establishment of small holdings was considered, but the land was not suitable for the purpose, and it was decided that the first effort should be made to encourage the provision of a good milk supply for the town and dairy produce in general. There was, however, an immediate demand for small holdings of from one to five acres from people who saw in the garden city scheme a way back to the land, and, while not encouraging the demand, the company decided to set

aside a small area of land on the edge of the future town area in what was agreed to be the most favourable position for small cultivation, for letting to the most promising applicants. Extra land was also wanted by people who thought of taking the opportunity of country surroundings to grow vegetables and rear poultry. A total area of about twenty acres was thus taken up; but none of the tenants was successful and all the land soon came back into the company's hands.

## § 2

An important step was taken in 1921, when an arrangement was made with a body calling itself the New Town Trust to become tenants of the agricultural area as it came into hand for the purpose of farming it as a distinct garden city enterprise. The New Town Trust was formed in 1919 by a group of people, most of whom were members of the Society of Friends, with the object of securing an estate and establishing upon it a small town or village based primarily on agricultural pursuits in association with other forms of industry. The enterprise was intended to be a social experiment, not to be run for profit, though the promoters were influenced by garden city ideas, many of them having had some association with Letchworth. They had taken an interest in Welwyn Garden City as soon as it was started, and it was natural that they should have considered to what extent they could associate themselves with the new town, and that after discussion they should find that it gave them an opportunity of carrying out at least one main feature of their scheme. The garden city company agreed to lease to the trust 500 acres of land, including building land not yet ready for development as well as part of the agricultural belt; additional land was afterwards leased, so that the total area held by the trust at one time amounted to 1,650 acres, and they became the sole agricultural tenants. The New Town Agricultural Guild Ltd. was formed to carry on this agricultural business. The guild was financed by the trust, which also controlled its general policy; the business being managed by a separate committee, on which the workers were represented. The object of the agricultural guild was to supply the town with agricultural, market-gardening, and dairy produce, to link together agriculture with the general life of the town, and to improve the general status and condition of the agricultural workers.

Attention was first given to the milk supply. One of the existing farms was converted into a model dairy and a herd of pedigree dairy shorthorn cattle was started. The intention was to produce the highest standard of milk, and the Ministry of Health's certificate for 'certified' milk was secured. Arrangements were made with the Welwyn Stores for the distribution of this milk, and to encourage its consumption the price was fixed at ninepence per quart delivered. A determined attempt was made by the stores as the distributing agency to popularize the use of this milk, and while the sales steadily increased, especially in the summer months, it was found that its high price militated against its general use. The Health Council co-operated by recommending its use to mothers for children, and the stores spent a considerable amount in advertising, but it



was found impossible to get the demand up to a point at which the production and sale of the milk could be made to pay. Consequently the guild, while continuing the production of 'certified' milk, had to embark upon the production of ordinary milk, and the stores and the guild working together, one on the side of production and the other on distribution, developed as perfect a system as could be devised under the circumstances for the supply of milk for the town. This milk was at first supplied at the lowest possible price in customers' own containers, and every endeavour was made to ensure absolute cleanliness at every stage of its handling. The quantity of milk distributed by the stores was at the rate of three-fifths of a pint per day per head of the population, under this system, which, at that time, was a high average. Later, the loose milk was replaced by bottled milk, and when the guild was wound up, and milk supplies were obtained from farmers in the usual way, the stores established a system of testing and grading the milk received, and by this means and the payment of bonuses based on content and purity an attempt was made to establish a clean milk supply. The stores dairy had its own laboratory for the purpose of continuous tests, and by careful supervision of handling in distribution it was intended to avoid pasteurization. The attempt lasted until after 1928, but no doubt involving too much responsibility it was abandoned, and a pasteurizing system was installed. Of course, dairymen from the surrounding farms and towns had nothing to hinder them except distance from supplying milk to the town direct, and this competition had to be met. When the branch of the co-operative society was opened it also established a milk supply. It cannot be said that the original aims of those who worked to start the town's milk supply have been fulfilled; for the town now submits to pasteurized milk, though 'certified' milk is still, of course, obtainable.

### § 3

The business of the agricultural guild was conducted by a director of agriculture. The departments included market gardening and fruit growing, milk production and cattle breeding, pig rearing and feeding, poultry. At the peak of its activities, the guild had 244 head of cattle, pedigree dairy shorthorns, 500 pigs, 47 horses and 3 tractors for working the arable land chiefly.

Owing to the small area of pasture, most of the feeding was done with soiling crops—i.e. green succulent crops are grown on the arable land and carted to the cattle, either in the sheds or on the grassland. For winter consumption use was made of silage.

Pig-farming entered fairly largely into the scheme with the object of supplying pork and home-cured bacon. Pedigree herds of Middle Whites and Large Whites were the breed kept, as being the most likely to give the quality that was desired. Exhibiting at agricultural shows was indulged in as a means of proving the class of animals kept, with good results, and many high awards were got.

A model commercial egg farm for two thousand laying hens was formed; some

fruit growing was done and a large area was used for vegetables, and a range of glass-houses constructed for cucumbers, tomatoes, and flowers.

The total number of agricultural workers on the entire estate when purchased for the garden city was an average of twenty-nine, with additions at harvest; the employees of the guild numbered seventy-two after a year or two.

Unfortunately the agricultural guild succumbed under the stresses of the agricultural depression that afflicted the country in the late nineteen-twenties. Its market in the new town was not large enough to enable it to take advantage of its specialized production, so that it had to compete in a restricted market, surfeited with low-priced agricultural products of all kinds. The guild was conducted on a high level of efficiency for the highest quality output, and had it been given the chance of meeting the varied demands of a large population it might perhaps, though this is doubtful, have been able to survive. For success, it needed a first-class marketing system, and although it had the nucleus of such a system in the Welwyn Stores, that undertaking was then too small to do what was required, and business outside the town and even extending to London was needed. In fact, the thing was impossible; for the national economy, which depended on the suppression or ignoring of agriculture, not the fostering of its well-being, was against all that the guild stood for, and it was bound to fail. This failure was a disappointment to the disinterested people who had pinned their hopes of success upon an agricultural experiment in a new community, and a blow to the garden city itself.

There is no need to ignore the fact that the agricultural guild operated under particular difficulties. Its land was not chosen on its agricultural merits as good productive land, but because it happened to form part of the garden city. Most of the land was held on a tenure that enabled the garden city company to take it for development at short notice, so that the guild was in uneasy occupation, which was not conducive to the good management of its affairs. Moreover, the guild was independent of the garden city company, having its own policy and aims, and, though efforts were made to effect it, there was never the integration between the guild and the company that was necessary for real prospects of success.

When the guild was wound up, the land was re-let to tenant farmers, under the normal conditions, the garden city company putting down to grass and retaining in its own hands for some years areas expected to be required for early development. Some part of the enterprise still remains in the poultry farm, the market garden, and the orchards.

The last word upon the agricultural belt of Welwyn Garden City has not yet been said. The belt was at first and still remains a nominal one. It ought to be made a reality; the difficulties in the way are first the continued instability of agriculture as an industry and secondly that the area of the estate is too small. Under the new town and country planning law it should be possible to define the agricultural belt, irrespective of its inclusion within the garden city; we must hope that that possibility, which may be slender, will be realized.

## CHAPTER VII

### ITS FINANCE

Its financial basis will in any case be found in the fact that the concourse of numbers is itself a cause of increased economic efficiency. ALFRED MARSHALL, *Principles of Economics*

#### § 1

WELWYN Garden City has been developed by a joint-stock company named Welwyn Garden City Ltd. The company was registered on 29th April 1920. Preceding it there had been the Second Garden City Ltd., formed in the previous October by Howard himself, but the memorandum and articles of that company were not considered to be satisfactorily drawn up, and the new company was formed. The memorandum and articles of association of Welwyn Garden City Ltd. are similar to those of other companies registered under the Companies Acts. The object of the company as expressed in its memorandum of association is:

To found develop and carry on in the county of Hertford or elsewhere a garden city that is to say a complete town with industries public services dwellings and social amenities surrounded by a permanent rural belt.

The company had an authorized share capital of £250,000 in shares of £1 each, entitled to a cumulative dividend at a rate not exceeding 7 per cent per annum, payable out of the profits of the company. The memorandum limited the dividend upon future shares that might be created as follows:

. . . Shares in the increased capital of the company shall be issued subject to a limitation of the dividend thereon to a rate not exceeding two per cent above the actual percentage per annum yielded by any British Government security for the time being subsisting at the lowest price current on the London Stock Exchange on any day during the three calendar months next preceding the subscription or offer for subscription of the shares.

The object of the limitation of the dividend was to ensure that the increased value of the land should be used for the benefit of the town. The disposal of surplus profits was regulated by the articles of association thus:

After payment of any dividends to members according to their rights and interests the profits remaining shall be devoted to any purpose or purposes which the company or its directors may deem for the benefit directly or indirectly of the garden city to be established by the company or its inhabitants.

A further clause provided that in the event of a winding up of the company the surplus assets after meeting the company's liabilities and repaying the shareholders with any accumulated dividends outstanding should be devoted to the benefit of the garden city to be established. Under a scheme of arrangement, which became operative in September 1934, to which reference will be made on a later page, these provisions were



cancelled, so that there is now no limitation upon the dividends that may be declared upon the shares, and no restrictions upon the application of the profits or upon the distribution of the assets in a winding up.

Originally, too, the company had a special class of directors called 'civic directors'; the clause in the articles creating it read as follows:

In addition to the other directors for the time being of the company three directors (in these articles referred to as 'the civic directors') may be appointed in accordance with the following provisions:

(a) When and so soon as a parish council urban district council or other similar local authority having jurisdiction over the area comprising or substantially comprising the area of the Welwyn Garden City Estate shall be constituted such local authority may appoint not more than three of its members resident on the said estate to be the civic directors of the company.

(b) The civic directors shall hold office for the term of one year from the date of their appointment or such shorter period as such local authority may prescribe and shall be eligible for reappointment.

(c) The articles herein under the heading rotation of directors shall not apply to the civic directors and they shall not be included in calculating the number of directors to retire by rotation at any ordinary general meeting. A civic director shall not be liable to be removed by an extraordinary resolution of the company.

(d) Each civic director shall be required to hold at least one share in his own right in the share capital of the company.

(e) The appointment of a civic director and the term for which he is appointed shall be evidenced by the certificate of the chairman or clerk of the local authority making the appointment. Such certificate may be recorded on the directors' minutes and when so recorded shall be conclusive evidence of such appointment and term of office.

(f) A civic director shall cease to be a director of the company if he ceases to be a member of the local authority appointing him such director or if he ceases to reside in the area of the Welwyn Garden City Estate.

(g) Save where otherwise expressed provided by these articles the civic directors shall have the same powers and authorities and be under and subject to the same duties and liabilities as if they had been appointed by the company in general meeting.

The object of the creation of the civic directors was to bring the inhabitants of the town in their corporate capacity in touch with the work of the company from the start of the scheme. This provision was brought to an end in the scheme of arrangement of 1934 already mentioned.

## § 2

The prospectus of the company offering the share capital for subscription was issued on 4th May 1920, and it was anticipated by many people whose opinion was of some weight that the capital would be subscribed. The prospectus was fully advertised in the press, and was favourably received; but the subscriptions fell considerably short of expectations. The amount raised was no more than £90,350 out of £250,000 offered. This failure to raise the initial capital was due partly to the comparatively small dividend of 7 per cent that could be received by investors (at a time when as much as 10 per cent and more was being offered), partly to the fact that there was a limitation of dividend and no prospect of speculative profits, but also to the fact that the flotation of the company came at almost the precise moment of the post-war financial collapse. The effects of

financial deflation were thus immediately felt in this almost disastrous result of the capital issue. It was also felt in the restriction of credit and the fall in prices that began to take place. No worse period could have been chosen for the initiation of such an enterprise as that of a garden city, which inevitably involves a large amount of capital expenditure. The failure of the capital issue almost brought the scheme to an end, but the directors were determined to go on and were able to borrow from the bank (on their personal guarantees) sufficient money to enable the purchases of the property to be completed and the development works to proceed. In one sense it is fortunate that the capital issue was not successful; for much of the money would have been spent before deflation and its consequences had reduced prices. As it was development was checked, and the utmost caution had to be observed in view of falling markets. Building and other similar prices did not, however, fall so rapidly as prices in other markets, because the Government's housing scheme was still in full swing. It was not until that scheme was slowed down, two years later, that prices of building materials, water and sewer mains, etc., came down. Welwyn Garden City, therefore, was a victim of the Government's policy of credit restriction accompanied by the maintenance of inflated building costs, the effects of which fell indiscriminately on good and bad alike. Fortunately the scheme was so sound that it survived the strain and dangers of those early days in its history, but the effects of financial stringency were felt for a long time.

### § 3

To give support to the undertaking under the situation that arose, the directors personally, with one or two abstentions, subscribed for £100,000 shares, paying a special application amount of one shilling a share, the balance to be called up only on a winding up of the company. Some of these shares were afterwards fully subscribed and transferred to other holders, and all were got rid of under the scheme of arrangement already referred to. By subscribing for these shares, the board declared its belief in the enterprise; it was a bold and might have proved a foolhardy action, for the liability was heavy, and there was no possibility of personal advantage accruing to those who undertook it.

A new prospectus was issued, and the shares were put on continuous issue, with the result that rather more than a further £22,000 was subscribed over the next two years. This meant that the company was dependent upon borrowed money, and it became necessary to put the borrowings on a proper basis. For that purpose a series of £150,000 debentures was created in June 1921, constituting a charge on the floating assets of the company, redeemable in 1961 and bearing interest at the rate of 6 per cent per annum. These debentures were first issued privately and afterwards on a prospectus which was circulated among people likely to be interested in the undertaking. They were fully taken up by June 1924, when a series of £150,000 ten-year development bonds was created, bearing interest at the rate of 6 per cent per annum and constituting a

further floating charge ranking after the debentures. The bonds were repayable in 1934 at the rate of £105 per cent. The directors considered that the company should be in a position by 1934 to consolidate its borrowings and to issue an attractive security to investors on favourable terms, as by that time the revenues of the concern should, it was thought, be considerable. When the bonds were taken up, 6½ per cent debenture stock was created in May 1927. Although no publicly advertised issue of any form of capital was made by the company since its first issue of shares to test the attitude of the ordinary investor to the undertaking, there could be no doubt that it remained unchanged. The reasons were easy to perceive. The dividend on the shares was limited, and there was no guarantee that even that limited return would be earned. Had Welwyn Garden City Ltd. issued its initial capital in the form of ordinary shares entitled to the full profits of the undertaking it is possible that there would have been no difficulty with the issue, for the commercial exploitation of such a land development scheme had a good prospect of being made highly remunerative. But the company could not have made such an issue of capital and have retained its character as an undertaking conducted in the public interest. The position with regard to the raising of debentures did not become much better so far as the money market was concerned, for although the interest was paid it was not possible in the early stages to show a revenue position that made the security sufficiently attractive to the investor who had no particular interest in garden cities. It was with such facts in mind that the committee appointed by the Minister of Health to advise on the best methods of dealing with slum areas, when recommending the establishment of garden cities as a means of dealing with the slum question, stated (in its report of March 1920) 'that the investment of a considerable amount of capital must be contemplated in . . . the general development of estates, the return upon which must be delayed for a considerable period,' and recommended in its report of July 1921:

That the development of self-contained garden cities either round an existing nucleus or on new sites should be encouraged and hastened by State assistance in the early stages, such assistance to take the form of a loan secured as a first charge upon the land developed as a garden city.

As a result of the committee's recommendations the Government introduced legislation to enable loans to be granted to garden city companies, contained in section 7 of the Housing Act, 1921, which read as follows:

(1) Subject to such conditions as the Treasury may prescribe and up to an amount approved by the Treasury, the Public Works Loan Commissioners may advance by way of loan to any authorized association within the meaning of section ten of the Housing (Additional Powers) Act, 1919, such money as the association may require for the purpose of developing a garden city in accordance with a scheme approved by the Minister, and section sixty-seven of the Housing of the Working Classes Act, 1890 (which makes provision with respect to loans by the Commissioners aforesaid), as amended by section twenty of the Housing, Town-Planning, etc., Act, 1919, shall, subject to the provisions of this section, apply to any advance in pursuance of this section as it applies to a loan to a public utility society.

(2) The power to make advances under this section shall be exercised during such period as the Treasury may prescribe.

The Welwyn Garden City Company was approved as an authorized association and made application for an advance under the above section. The conditions under which



advances could be made were governed by a Treasury minute, dated 28th October 1921, and were as follows:

1. Advances may be made in any individual case up to a total of 75 per cent of the value, as approved by the Minister of Health, of the real and leasehold interest in land and houses acquired or to be acquired by an association together with the development thereof, provided that the amount of the advance to any association shall not at any time exceed the sum actually raised and received by that association by the issue of share and loan capital.
2. The security for the advances shall be approved by the Public Works Loan Commissioners.
3. The rate of interest shall be such as the Treasury may from time to time direct.
4. The mortgages of the Public Works Loan Commissioners shall contain such covenants as the Commissioners may be advised are necessary for the security of the loan and for the due application of the money advanced.
5. The Minister of Health shall satisfy himself in such manner as he may think fit that any loan advanced by the Public Works Loan Commissioners is applied to the purposes for which the loan was granted.
6. The Public Works Loan Commissioners shall not grant a loan to an authorized association unless the Minister of Health has certified that the development work in respect of which the association has applied for a loan is essential for the purposes of the scheme, that the cost is reasonable, and that he is satisfied with the progress made in the development of the scheme.
7. Any association to whom an advance is made shall be required to give an undertaking to guarantee the repayment of capital and interest of any future loan granted by the Public Works Loan Commissioners to a public utility society for the purpose of building houses, etc., upon land owned by the association provided that no such loans shall be granted without the consent of the association.
8. The period under Section 7 (2) of the Housing Act, 1921, during which advances may be made for the purposes of this Minute shall not exceed five years from the date of this Minute.

Under these terms a first advance of £117,000 was made by the Public Works Loan Commissioners in April 1922, making with subsequent advances a total of £313,577. The first loan was for a period of thirty years, repayable by equal half-yearly instalments including principal and interest, the rate of interest being  $5\frac{1}{2}$  per cent; subsequent loans were for periods of twenty-five years, the interest being 5 per cent upon the second and  $4\frac{3}{4}$  per cent for later loans. The amounts of the loans received were much less than was anticipated, and did not in fact cover the approved expenditure. Also there were long intervals, as much as from six to twelve months, between the date of making the application for the money and the date of its receipt. For instance, the first loan was applied for on 28th November 1921, and received on 20th April 1922; the second on 26th October 1922, and received on 21st March 1923; the third on 25th May 1923, and received on 13th August 1923; and the fourth on 24th January 1924, and received on 30th June 1924, and so on. There was, too, uncertainty as to the amount of the loan, the money had to be spent before the application could be made, and the Public Works Loan Board put every obstacle in the way of the company that it could devise, for such loans had in them the possibility of default, and the loss of any loan made by the board was something it was not willing to contemplate. The company was told frankly that the board did not welcome its applications, and there can be no doubt that the method was a bad one. While the loans continued, the company was subject to inspection by the technical officers of the Ministry of Health, and while such inspection was by no means objected

to, and at least enabled development projects to be thoroughly examined, it also made them subject to delay, and the advice of the ministry's officers was not always sound. For instance, the company was severely criticized for not developing sites for residential purposes on the Great North Road, and the effect of the company's refusal to alter its town-plan to enable this ribbon development to be carried out for the sake of immediate revenue, was overcome with some difficulty. Neither did the ministry like the shopping policy, or the idea of architectural control of building: it was urged that everybody should be allowed to come. An application by the company for additional land to the east to enable the town-plan to be completed and the population of 50,000 provided for, which the Act gave the ministry power to acquire, was also turned down until the company had developed the land it already possessed. These were examples of short-sightedness, or, perhaps, it would be better to describe them as examples of the inability of civil servants to take responsibility beyond what was necessary, or to display practical sympathy with initiative. Of course, relations with the ministry and the loan board always remained excellent; for every one was polite at no matter what cost to the ultimate interests of the garden city. There can be no doubt that the Government loans were a seriously hampering influence upon the undertaking so long as they existed; they were repaid in 1932 under the first capital reconstruction scheme to be described later.

## § 4

The following tables summarize the financial position of the company:

TABLE A

## THE CAPITAL POSITION OF THE COMPANY FROM YEAR TO YEAR

<i>Year</i>	<i>Capital</i>	<i>6% Debentures</i>	<i>6% Development Bonds</i>	<i>6½% Debenture Stock</i>	<i>Government Loans</i>	<i>Bank Loans</i>	<i>Other Loans and Mortgages</i>
	£	£	£	£	£	£	£
1921	99,113	—	—	—	—	87,939	17,220
1922	115,089	47,950	—	—	—	128,500	4,090
1923	116,069	85,900	—	—	135,056	13,500	3,450
1924	116,445	146,615	—	—	145,285	13,859	15,200
1925	116,593	150,000	61,470	—	180,504	45,162	20,500
1926	116,604	150,000	129,180	—	215,158	47,097	19,046
1927	117,800	150,000	138,850	116,873	259,286	21,823	1,350
1928	117,800	150,000	141,250	195,986	259,677	24,181	5,750
1929	124,235 <sup>1</sup>	150,000	150,000	394,957 <sup>2</sup>	247,671	15,409	20,000
1930	124,238	136,500 <sup>3</sup>	150,000 <sup>3</sup>	396,891 <sup>3</sup>	228,275	27,525	20,000

<sup>1</sup> £6,435 shares were issued in exchange for £13,253 shares in Welwyn Stores Ltd. which was taken over by the company.

<sup>2</sup> The company took over the Loan Stock in Welwyn Stores Ltd. amounting to £54,376, and issued Debenture Stock in exchange amounting to £66,818.

<sup>3</sup> In accordance with the terms of a first Scheme of Arrangement sanctioned by the High Court on 31st March 1931 the Debentures, Development Bonds, and Debenture Stock of an aggregate amount of £683,935 were surrendered for £287,193 6 per cent Debenture Stock and £396,742 7 per cent Income Stock.

## THE BUILDING OF SATELLITE TOWNS

TABLE A—THE CAPITAL POSITION OF

Year	Capital	6% Debenture Stock	7% Income Stock	Government Loans	Bank Loans	Other Loans and Mortgages
	£	£	£	£	£	£
1931	124,239	287,193	396,742	215,595	89,372	20,000
1932	124,239	287,193	396,742	313,577	10,330	20,000
1933	124,239	287,193	396,742	— <sup>1</sup>	5,390	270,000 <sup>2</sup>
1934	124,239 <sup>2</sup>	287,193 <sup>2</sup>	396,740 <sup>2</sup>	—	33,933	270,000

<sup>1</sup> The loans from the Public Works Loan Board were repaid, in part, from the proceeds of the sale of the water undertaking to the urban district council on 1st October 1932, and the balance was met from the proceeds of new mortgages, at a lower rate of interest, secured on ground-rents.

<sup>2</sup> The shares (written down from £124,239 to £11,956), the 6 per cent Debenture Stock (£287,193), and the 7 per cent Income Stock (written down from £396,740 to £158,696) were converted into fully paid £1 Shares in accordance with the terms of a second Scheme of Arrangement approved by the High Court in 1934. Welwyn Public Utility Society Ltd. and New Town Trust Ltd. were amalgamated with the company in accordance with the terms of the scheme. The major part of the increase in the amount of 'Other Loans and Mortgages' is attributable to the amalgamation.

EXPENDITURE BY THE COMPANY ON L

Year	Land, Timber, and Buildings		Freehold Residential Buildings	
	Annual	To Date	Annual	To Date
	£	£	£	£
1921 <sup>1</sup>	97,536	97,536	—	—
1922	32,495	130,031	—	—
1923	2,455	132,486	—	—
1924	1,902	134,388	—	—
1925	1,802	136,190	8,986	8,986
1926 <sup>2</sup>	9,634 <sup>4</sup>	126,556	12	8,998
1927	1,576	128,132	—	8,998
1928	5,173	133,305	3,743	12,741
1929 <sup>3</sup>	3,439	136,744	—	12,741
1930	962	137,706	—	12,741
1931	971	138,677	1,030	13,771
1932	9,758	148,435	—	13,771
1933	195	148,240	—	13,771
1934	2,261	150,501	—	13,771
1935	1,574	152,075	45	13,816
1936	2,396	154,471	31,763	45,579
1937	46,930	201,401	78,229	123,808
1938	1,986	203,387	93,975	217,783
1939	2,990	206,377	14,035	231,818
1940	4,130	210,507	27,722	259,540
1941	172	210,679	11,841	271,381
1942	181	210,498	—	271,381
1943	166	210,332	—	271,381
1944	166	210,166	—	271,381
1945	166	210,000	—	271,381
1946	20,300	230,300	—	271,381
1947	135,938	366,238	—	271,381

<sup>1</sup> Includes a balance of £28,715 due on completion of the purchase of the original estate.

<sup>2</sup> The book value of the hutted camp (£10,164) was written off to General Development Account.

<sup>3</sup> A valuation of the freehold estate, made by Sir H. Trustram Eve, as at 31st March 1929, was brought into the Balance Sheet at that date, and replaced the accumulated expenditure on land, timber, buildings, drainage, highways, and general development.



BY YEAR FROM YEAR TO YEAR (*continued*)

Year	Capital £	6% Debenture Stock	7% Income Stock	Government Loans	Bank Loans £	Other Loans and Mortgages £
1935	536,300	—	—	—	47,617	700,404
1936	536,300	—	—	—	91,369	718,162
1937	536,300	—	—	—	143,588	793,184
1938	536,300	—	—	—	168,190	922,508
1939	536,300	—	—	—	134,444	1,030,251
1940	536,300	—	—	—	164,902	1,041,775
1941	536,300	—	—	—	145,895	1,039,660
1942	536,300	—	—	—	107,410	1,067,636
1943	536,300	—	—	—	108,113	1,055,959
1944	536,300	—	—	—	34,168	1,094,397
1945	536,300	—	—	—	16,212	1,081,044
1946	536,300	—	—	—	24,655	1,044,104
1947	536,300	—	—	—	182,351	1,082,115

## SEWERAGE, DRAINAGE, AND HIGHWAYS

Leasehold Residential Buildings		Drainage		Highways	
Annual £	To Date £	Annual £	To Date £	Annual £	To Date £
—	—	11,338	11,338	3,208	3,208
—	—	8,331	19,669	4,341	7,549
—	—	5,763	25,432	12,864	20,413
—	—	25,631	51,063	9,347	29,760
—	—	13,371	64,434	18,656	48,416
—	—	24,601	89,035	34,393	82,809
—	—	9,355	98,390	25,092	107,901
—	—	4,242	102,632	8,294	116,195
—	—	10,873	113,505	7,775	123,970
—	—	20,237	133,742	5,532	129,502
—	—	8,112	141,854	16,444	145,946
—	—	4,472	146,326	5,723	151,669
—	—	33,983 <sup>a</sup>	112,343	1,479	153,148
—	—	877	113,220	3,602	156,750
600,656	600,656 <sup>a</sup>	941	114,161	1,410	158,160
1,791	602,447	6,191	120,352	6,735	164,895
4,625	607,072	12,188	132,540	5,741	170,636
1,836	605,236	22,009	154,549	25,057	195,693
830	604,406	3,970	158,519	14,377	210,070
—	604,406	2,803	161,322	18,827	228,897
—	604,406	1,548	162,870	7,787	236,684
—	604,406	—	162,870	659	237,343
—	604,406	—	162,870	—	237,343
—	607,726	—	162,870	—	237,343
3,320	607,726	—	162,870	—	237,343
—	607,726	—	162,870	—	237,343
—	607,726	—	162,870	1,579	238,922
—	607,726	—	162,870	5,554	244,476

<sup>a</sup> Its are printed in italics.

sewage works were sold to the urban district council during the year, for the sum of £34,080. leasehold property was acquired from Welwyn Public Utility Society Ltd. and New Town Trust Ltd. on the formation of those societies with Welwyn Garden City Ltd. The sum of £600,656 represents the original cost of the . The leases were maintained because of the existing mortgages.

TABLE C

EXPENDITURE OF THE COMPANY ON GENERAL DEVELOPMENT AND COST OF RAISING CAPITAL

<i>Year</i>	<i>General Development</i>	<i>Cost of Raising Capital</i>
	£	£
1921	13,199	20,109
1922	32,119	21,569
1923	48,872	24,158
1924	64,893	25,559
1925	81,621	27,859
1926	106,479	31,481
1927	123,228	36,299
1928	146,669	39,743
1929	210,139 <sup>1</sup>	47,348 <sup>2</sup>
1930	258,926	
1931	281,900	
1932	300,257	
1933	322,274	
1934	343,655	
1935	343,655	

<sup>1</sup> From 1929 the general development expenditure was taken to be the deficiency arising in each year on the Revenue Account; this continued until 1934, after which there was a surplus on the Revenue Account, and the Development Account was not increased.

<sup>2</sup> After this year the cost of raising capital was charged to the Revenue Account.

TABLE D

EXPENDITURE ON THE ELECTRICITY SUPPLY

<i>Year</i>	£	<i>Year</i>	£
1921	212	1935	113,457
1922	11,149	1936	130,408
1923	14,744	1937	154,698
1924	25,059 <sup>1</sup>	1938	182,777
1925	33,910	1939	200,340
1926	40,349	1940	207,806
1927	50,973	1941	210,551
1928	59,229	1942	211,273
1929	67,390	1943	212,358
1930	80,953	1944	213,054
1931	90,837	1945	215,754
1932	95,289	1946	228,490
1933	100,103	1947	276,569
1934	106,854		

<sup>1</sup> From and including 1924 the figure is made up to 31st December in each year. The three earlier figures were up to 31st March in each year. Depreciation is excluded from these figures; the Depreciation Fund at 31st December 1947 amounted to £111,690, so that the net expenditure was £164,879. The total amount received for the undertaking in British Electricity Stock in 1948 was £215,000.

TABLE E  
RECEIPTS FROM RENTS AND OTHER SOURCES

<i>Year</i>	<i>Rents</i>	<i>Water,<sup>1</sup> Electricity<sup>2</sup> Supplies, and Sundry Receipts</i>	<i>Subsidiary Undertakings</i>	<i>Ground Rents</i>	<i>Freehold Farm &amp; Other Rents (including Weekly Rented Houses)</i>	<i>Leasehold Rents</i>
	£	£	£	£	£	£
1921	—	—	—			
1922	4,017	374	1,840			
1923	4,967	748	4,935			
1924	6,222	1,110	4,591			
1925	7,599	2,796	8,765			
1926	8,765	3,195	13,739			
1927	10,289	4,219	18,128			
1928	11,425	4,095	17,155			
1929	12,170	5,065	3,093			
1930	See Cols. 4, 5, 6.	7,528	21,129	10,380	3,727	
1931		7,151	21,155	12,078	3,631	
1932		6,658	15,772	13,491	3,895	
1933		4,229	8,066	14,703	3,577	
1934		34	701	15,389	3,647	
1935		1,743	4,127	16,011	3,914	21,347
1936		2,306	15,045	17,038	5,061	45,099
1937		2,929	15,695	18,567	10,387	45,950
1938		3,476	21,623	20,587	19,048	46,465
1939		1,548	32,539	22,161	27,409	45,867
1940		2,559	34,335	26,446	29,020	46,559
1941		2,947	35,251	27,902	32,693	47,345
1942		3,638	42,101	28,219	33,632	47,912
1943		4,169	38,229	28,526	33,678	48,149
1944		4,013	41,069	28,346	33,915	48,221
1945		3,658	41,178	28,764	33,572	48,096
1946		2,744	40,152	28,988	34,388	48,782
1947		1,384	45,223	29,694	36,729	49,987
1948		2,368	44,280	30,745	39,644	51,969

<sup>1</sup> Revenue from electricity ceased to appear in this column in 1924 when the electricity company was operating, and from that date the net profits are included in the next column. These profits ceased on 1st April 1948.

<sup>2</sup> The water undertaking was sold to the urban district council in 1932.



TABLE F

## YEARLY BALANCES ON THE REVENUE ACCOUNT

<i>Year</i>	<i>Balance on Revenue Account before charging Interest</i>	<i>Interest</i>	<i>Net Balance on Revenue Account</i>
	£	£	£
1921	—		—
1922	5,815 (surplus)		5,015 (surplus)
1923	9,144 "		7,144 "
1924	10,888 "		7,338 "
1925	17,372 "		8,124 "
1926	23,182 "		8,233 "
1927	29,601 "		8,201 "
1928	28,238 "		5,238 "
1929	14,168 (deficiency) <sup>1</sup>		63,470 (deficiency)
1930	10,617 (surplus) <sup>2</sup>		48,787 "
1931	17,258 "		22,974 "
1932	17,530 "		18,357 "
1933	11,250 "		22,017 "
1934	21,995 "		19,381 "
1935	25,536 "	25,423	113 (surplus)
1936	— <sup>3</sup>	37,079	16,038 "
1937		40,020	20,138 "
1938		47,599	25,004 "
1939		54,213	29,960 "
1940		52,739	30,035 "
1941		54,387	36,934 "
1942		53,740	40,059 "
1943		52,687	41,322 "
1944		52,099	46,379 "
1945		50,900	46,742 "
1946		50,654	40,184 "
1947		50,736	39,636 "
1948		52,533	43,265

<sup>1</sup> The basis of the accounts was changed this year and the figures are not comparable with those of previous years. See the explanation in the text.

<sup>2</sup> The basis of the accounts was changed again this year and the figures are not comparable with those of the previous year. See the explanation in the text. From 1930 to 1934 the figures are comparable, except that as an effect of the scheme of arrangement in 1931 the amount of interest payable on the debenture stock and debenture bonds was reduced. In 1935 and after they are again not comparable with previous years owing to the effect of the scheme of arrangement of 1934.

<sup>3</sup> There is no point in showing this figure after 1935 as in that year the nature of the interest changed, owing to the scheme of arrangement, and a large item of interest upon residential properties taken over in the amalgamations referred to came into the account. The interest amount is, therefore, shown separately.

TABLE G

PREMIUMS RECEIVED ON LEASES, SALES OF LAND, ETC.

<i>Year</i>	<i>Annual</i>	<i>To Date</i>	<i>Year</i>	<i>Annual</i>	<i>To Date</i>
	£	£		£	£
1921	6,125	6,125	1935	93	144,375
1922	11,230	17,355	1936	4,273	148,648
1923	9,558	26,913	1937	7,212	155,860
1924	9,856	36,769	1938	17,762	173,622
1925	9,951	46,720	1939	14,706	188,328
1926	15,378	62,098	1940	5,621	193,949
1927	37,110	99,208	1941	1,246	195,195
1928	3,131	102,339	1942	206	195,401
1929	9,736	112,075	1943	1,650	197,051
1930	7,202	119,277	1944	45	197,096
1931	15,216	134,493	1945	—	197,096
1932	967	135,460	1946	3,310	200,406
1933	7,225	142,685	1947	13,769	214,175
1934	1,597	144,282	1948	29,523	243,698

## § 5

No revenue account was prepared for the first year, as the company was not then fully working; in the second year the net balance on the revenue account was equivalent to just over 5 per cent upon the subscribed share capital, and in the third and fourth years over 6 per cent each year. No dividend was, however, paid on the ordinary shares as, in view of the capital requirements of the company, the directors considered that the cash position of the undertaking did not justify it. In the report of the directors dated 19th June 1924 the position at that date was explained as follows:

The nature of the company's business, which is the creation of a town on a virgin site, involves the expenditure of capital in development costs, sewerage system, waterworks, and other services, throughout a considerable period. By reason of this expenditure, the estate which was purchased by the company at agricultural value is urbanized and acquires urban value; but the full realization of the revenue arising from this change of value is necessarily postponed.

A long-sighted view of the financial progress of the undertaking was certainly required, for it was clear that the expenditure upon the capital works which create the town must take time to fructify. To make that time as short as possible was of the utmost importance; otherwise the capital values created would have been offset by the failure to make income overtake interest and other charges.

## § 6

The slowness of development did, in fact, create such a situation, and, as will have been noted from the preceding tables, the company changed the form of the accounts in 1930, for the year ending 1929, in an attempt to deal with it. What was done, however,

was no more than to disguise the position that had then arisen. The board in that year found it impossible to discriminate between revenue and capital expenditure and gave up the attempt. Had the board continued to apply the principles that had previously been recognized, it would have found that its revenues had declined by £13,521 over the previous year's figures (or more than 39 per cent) and that the net result on the general revenue and expenditure account was an adverse balance of £15,172 in place of a profit of £5,238. There is no need at this date to describe how this occurred or the events that gave rise to it. The fact is that the undertaking was suffering under a situation that was too much for those responsible, and that loss of confidence brought about weak management. The following year another change was made in the presentation of the accounts, so that the revenue results could not be compared even with the previous year; but, in fact, on the same basis as for 1927 and earlier, there was an adverse balance for the year of £11,798. It was extraordinarily difficult to ascertain the position because of the ambiguity of the accounts, so that the shareholders had the facts hidden from them, and to what extent they were known to the board may be doubted.

After another year of uncertainty, the board was forced to face a capital reconstruction, when application was made to the High Court of Justice for permission to convert the debentures, debenture bonds, and debenture stock into holdings of new 6 per cent debenture stock and new 7 per cent income stock in varying proportions. Thus out of a total of £683,935 borrowed money, £287,193 was converted into a new interest-bearing security and £396,742 was made into income stock entitled to receive a return only out of the surplus revenues of the company. This meant a saving of annual interest of approximately £25,000.

However, the company's capital resources were hopelessly constricted by the terms on which the Government loans had been granted, for they were secured upon the whole of the freehold land, developed and undeveloped, and the water undertaking. In 1932, therefore, an obvious financial reconstruction was embarked upon: the company succeeded in selling the sewerage works and main sewers to the local authority, also the water undertaking (all with the advice of the Ministry of Health), and, with the proceeds, the loan from the Public Works Loan Board was reduced approximately to £210,000. As it was found possible to raise from new trustee mortgages a total of £250,000 on the security of the ground-rents alone, the Government loan was completely paid off, and the remaining land was freed. Furthermore, the heavy annuities payable to the Public Works Loan Board on an interest rate varying between  $4\frac{3}{4}$  and 5 per cent were replaced by straightforward interest of  $4\frac{1}{2}$  per cent, coupled with a limited sinking fund for a period of five years.

All this was a great financial relief, but it was not sufficient, for the company had been brought so low that in another two years it had to suffer a much more drastic reconstruction in which the shareholders were involved, and two subsidiary concerns were amalgamated with the company. The highly complicated scheme of arrangement was sanctioned by the High Court of Justice on 24th July 1934 and became operative the



following 29th September, and deserves to be recorded as a successful financial operation of great benefit to the undertaking. Under it, however, the shareholders lost 18s. out of each £1 of their shareholding, and the shares on which one shilling only had been paid, amounting to a nominal amount of £93,500, were cancelled, so that the share capital was reduced from a paid-up total of £124,239 to £11,956. The nominal amount of the share capital was at the same time increased to £537,000. Out of this capital the holders of the debenture stock were given shares to the amount of their holdings, and the holders of the income stock (who had not received any return) were given £40 shares for every £100 of their stock; this meant a loss of capital of £238,044. Under the amalgamation scheme, which was part of the arrangement, £125,000 housing bonds, issued by the Welwyn Public Utility Society Ltd. and guaranteed by the company, were converted into £62,500 shares in the company, and £76,525 cumulative income stock of the New Town Trust Ltd. was converted into £15,305 shares in the company; also the shareholders in the trust received a £1 share in the company for every £20 shares of the trust. Though the company took over responsibility for the New Town Trust, its capital was not in fact the company's, and the losses suffered by the trust, though severe, were no direct concern of the company's, though much regretted. The company's own capital written off under this arrangement amounted to £412,827, to which should be added £6,448 written off the shares in Welwyn Stores in 1929, when that concern was reconstructed by the company for its own purposes, making a total of £419,375 that was lost.

## § 7

As part of the arrangement outlined above the memorandum and articles of the company were amended, removing the limitation of dividend to which the share capital was entitled, so that the shareholders were given the full equity in the company, the garden city and its inhabitants being excluded from any interest in the company or its profits. The right of appointment of civic directors by the urban district council was at the same time ended.

Preliminary to the arrangement a consultative committee of most of the larger shareholders had been formed and it was agreed that the board should be reduced to six members, of whom three should be new members nominated by the committee, with three of the old members, one of the existing board becoming general manager with no seat on the board, the others resigning. Thus a new board took charge of the undertaking, without civic directors, and the company was brought as much within the category of ordinary joint stock enterprises as was possible.

The financial operations detailed above were the work of the company's financial secretary, J. F. Eccles, who six months after the final court order became general manager on the reorganization of the staff, and in 1945 was made managing director in recognition of his services, for it was his skill that had saved the company when it was about to founder.

The effects of the various changes that took place in the undertaking from 1928 onwards are to be followed to some extent in the financial statements set out in the tables on preceding pages. They do not tell the full story, and much remains to be explained; but in an undertaking such as that of this garden city company, where almost every one was working without precedents, and where there was little to guide the most experienced directing and administrative minds, the misunderstandings and conflicts of wills that arose are not to be regarded as surprising. The undertaking did, however, pull itself out of its major difficulties. A major element in the whole affair was the deplorable national situation, which partly explains the events of 1928, and certainly played a large part in what followed. The company was weakened by ten years of steady deflation and three years of severe economic depression. The deep depression in all business between 1930 and 1933 fell heavily upon the town. Many employees in local industry lost their work, and more than a few residents who worked in London also got out of employment. The result was that from 300 to 400 houses became empty in about nine months. Property values tumbled by 20 to 40 per cent and scarcely one new business could be persuaded to start up. It was without doubt a very difficult time.

The reconstruction of 1934 brought about the possibility of paying a dividend on the share capital, and in 1936 a first dividend of 2 per cent was declared. In 1937 the amount was 3 per cent, in 1938 4 per cent, and in 1939 5 per cent. No dividends were paid in 1940 and 1941, but in 1942 a dividend of  $2\frac{1}{2}$  per cent was paid, for each of the next four years 5 per cent, in 1947 and 1948 6 per cent. There were sufficient profits to have justified the maintenance of the dividend during the early war years; but the board decided to play for safety in view of war conditions and the large bank overdrafts to which the company was committed arising out of the extensive programmes carried out in 1938 and 1939.

## § 8

With a high rate of expenditure and a high rate of interest a sufficient surplus of capital values over costs was required to enable the undertaking to stand the burden of interest charges on capital until expenditure became revenue earning. We can see, therefore, the significance that development costs had in the eyes of those responsible for the finance of the garden city. Such costs mean the expenditure upon the development of the land, including the financial burden involved in producing, marketing, and holding it until disposed of. Much attention was given to this matter from the inception of the scheme, and although the figures cannot be given after the first few years, the costs up to that date are of interest. In the following statement the areas developed represent the areas served by the roads, water and sewer mains, and sewage disposal works constructed to date, and the costs are the total of the direct and indirect expenditure. The part of the expenditure which was considered to have had an influence upon the town area as a whole, such as compensations to tenants, the preparation of the town-plan, the

contour-plan, and much of the work of the engineers, surveyors, and others, was spread over the town area, not over the small area developed.

<i>Areas Developed (at 31st March 1924)</i>	<i>Acreage</i>	<i>Apportioned Cost per Acre including Land £</i>
Residential . . . . .	104.9	870
Workmen's housing and elementary school areas .	19.0	703
Commercial and industrial . . . . .	11.8	541

Were the figures available for later years they would be invaluable; unfortunately they are not.

Of course, it is not suggested that costs determine values; for so long as a market exists for land, values are decided not by costs but by the market. Usually in land developments, the margin between costs and value is so large that costs are lumped. This ought not to be done in an enterprise such as a garden city, where the land is held, not sold, where a continuing interest exists, and where a long-term programme of development is envisaged. At the same time, a rigid view of the incidence of costs is not desirable. Land development is a creative activity in the highest degree, depending upon foresight and imagination, and a new town is not to be built successfully by mere rules or financial regulations.

The area of land let and the ground-rents produced are given below:

<i>Residential Area</i>	<i>Area</i>	<i>Ground-rent</i>	<i>Premiums</i>
<i>Period</i>	<i>Acres</i>	<i>£</i>	<i>£</i>
1920-1	9.176	4	5,621
1921-2	14.170	423	5,605
1922-3	16.378	813	3,993
1923-4	23.250	1,299	965
 <i>Workmen's Cottage Area</i>			
<i>Period</i>			
1922-24	14.771	1	6,884
 <i>Commercial and Industrial Areas</i>			
1921-24	36.053	1,619	2,345

The writer is not in a position to continue the information given above, which was contained in the first edition of this book, and it would be too much to ask the garden city company to provide it. The following figures can, however, be given of the total ground-rents at the time of writing (1947):

<i>Acres</i>		<i>Ground-rents £</i>
452	(a) Residential area	14,852
159	(b) Industrial area	15,705
23	(c) Commercial area	
	Total ground-rents	30,557



## § 9

As was foreshadowed in the first prospectus of the company, subsidiary enterprises were very highly developed. Indeed, the financial structure of Welwyn Garden City was largely made up of the series of subsidiary companies under the control of the parent company. This policy was based on the belief that while the land *qua* land would ultimately yield a satisfactory return, anything like financial success within a reasonable time depended upon the development of subsidiary businesses to secure the revenue arising from the growth of population, and it was thought that a substantial part of the economic benefit of the town's development could be secured only by that means. The selection of these businesses was determined partly by their probable revenue-earning capacity and partly by the facilities they provided for the direct and indirect encouragement of the development of the town.

The housing societies, the factory and commercial building concerns, distributive business of the stores, and the business of the restaurant have already been dealt with. Those concerns did not primarily rank as profit-making instruments to the garden city company, apart from the ground-rents they paid and their consumption of water and electricity. The other businesses were water supply, electricity supply, building, brickmaking, gravel and sand pits, light railway transport, and nurseries. The water supply was carried on as part of the company's main undertaking, but in 1932 was disposed of to the urban district council. The electricity supply was conducted by a separate company, financed by the garden city company.

Welwyn Builders Ltd. had a small amount of outside loan capital, since repaid, and is wholly financed by the garden city company, and the whole of the profits go to the company. The builders were from the start a valuable adjunct to the development of the estate; the undertaking has already been fully described. The brickworks and the gravel and sand pits have also been mentioned.

The railway sidings and light railway transport were an important factor in the early development of the estate. The nurseries grew shrubs and trees for the company's own use and for sale in the town, and did the company's own horticultural work and contracted for private gardens. When these businesses were started they had boards to control them containing members who were not on the board of the company, with the object of getting the co-operation of people with expert knowledge of the subject willing to take an active interest in the growth of the town. However, the system did not yield the advantages expected from it, so that in 1929 it was ended, and the subsidiary businesses were then conducted as departments of the company without outside directors.

## § 10

Land at Welwyn Garden City is not sold freehold, but is leased on ordinary tenancies for agricultural purposes and on building leases for 999 years at fixed ground-rents.

No attempt was made to adopt Howard's rent-rate scheme or to introduce leases at revisable rents. It was believed that it was possible to secure the unearned increment by other means. The leasehold system was adopted to enable control over building to be effective. It is essential to good planning that the character of development should be maintained, that residential areas should be kept as such, shopping areas kept for shops, and industrial areas for factories; this can be ensured under a leasehold system. The board did in fact consider the question of granting leases on terms that would provide for periodical revisions of the ground-rent. A frequent period for such revisions, such as ten or twenty-one years, was considered impracticable, as unless the maximum amount by which the rent could be increased was determined beforehand the lease would not have been acceptable to prospective builders; for it would not be considered satisfactory to commit oneself to an unknown liability for rent. Yet to fix the maximum amount of the possible increase of rent in advance, though reducing the uncertainty, was still unsatisfactory because it would merely anticipate a future increment which might have no relation to the facts. The board therefore considered the adoption of a 999-years lease, revisable at the end of each 99 years on the basis of any increase in site value of the land, the amount of the revised rent to be ascertained in the first place by the company's surveyor for the time being, and in the event of dispute by arbitration. The company was, however, advised that any such covenant in a lease would be bad, on the ground that the amount of the revised rents from time to time would be uncertain and that an agreement to pay an uncertain sum is not a rent. The company was therefore driven to consider the alternative of providing for a definite increase at the end of each period of 99 years, giving the lessee power to determine the lease at the end of each period. But this in practice had not only the objection already mentioned in connection with revisions at frequent periods, but would probably mean that if the site value had increased by as much as, or more than, the increased rent, the lessee would pay it; while if the site value had gone down and the lessee thought the increased rent was too much he could determine the lease; but in that event he would be penalized by the loss of all the buildings and improvements, so that probably he would be compelled to pay the increased rent although the site value had gone down. It is worth while to examine closely what exactly is behind the proposal to arrange for increases of rent at periods. The main idea is that the community should benefit by the rise in land value which is created by the community, and at the same time avoid the objection to the normal leasehold system whereby the lessor resumes possession at the end of a term of years, and asks the lessee to renew at a rack-rent, which includes not only the rise in value of the land, but often the annual value of the lessee's improvements. It is the same end as that which is aimed at in all schemes for taxation of land values: that the increment in site value being created by the presence of the community shall be enjoyed by the community as such and not pass into individual hands. From a practical point of view, however, what does this increase in the value of the land amount to, and what is its present value? Actually it has little market value. The present value of £100 at the end of 99 years on

the 5 per cent table is approximately 16s. The difference in present value between a 999-years lease at a fixed annual rent of £10 and a lease under which the annual rent is to be increased from £10 to £20 at the end of the first 99 years is 32s. Therefore for practical purposes increments in site value at the end of 99 years could be ignored. In the face of this fact the board decided to adopt a 999-years lease at a fixed rent, which gave complete security to the lessee, and for all practical purposes was as good as freehold; indeed, better than freehold, because the benefits of the covenants of the lease entered into by all the lessees would be enjoyed in common by them all. The complications and uncertainties that would have arisen in attempting to get recognized an unfamiliar form of lease were avoided and the company has financially lost nothing that could have been secured.

It is necessary to bear in mind that increases in site value of residential property, which is maintained as residential property and not used for commercial or other purposes, are not usually on a high scale. If a residential area keeps its character or improves its amenities and attractiveness, so that the demand for property is specially stimulated, a certain amount of appreciation in value will undoubtedly arise (there has, for instance, already been such appreciation in value at Welwyn Garden City, many site values having increased from 10 to 50 per cent); but such increments can be regarded in the light of compensation for the risk of building in a new town.

One important factor that will always tend to prevent residential land from largely increasing in value is that there is plenty of land for the purpose, if not in one particular place at any rate elsewhere with approximately similar advantages, so that the supply is capable of extension to meet any demand. It is true, of course, that residential land in Welwyn Garden City is limited in extent because the town is limited in size, and that the increasingly superior advantages that such land may have by reason of the amenities and other features of the town will tend to increase its value over land in other places. But when other garden cities are developed they may be expected to possess equivalent advantages. The same remarks apply to industrial land to a very great extent; the appreciation in value in such land is moderate as a rule. It is when we come to land used for commercial and trading purposes that increments in value in the course of time may altogether exceed expectations, and may fairly be regarded as largely contributed to by the presence and increase of population. Of all land values these are the most valuable, and it is justifiable to endeavour to secure some part, at least, of the values for the community. In old towns the existence of long-continued vested interests would make such attempts difficult if not impossible; but in a new town, before vested interests are established, it should be practicable to see that the land values created are not allowed to pass entirely into private hands. One way of doing that would be a system of short leases for shopping and commercial purposes; but at Welwyn Garden City a system was put into operation which has been described in an earlier chapter of this book.

Another point in this connection is that the comparatively sparse development under a garden city plan prevents the fabulous increase of land values that exist in congested



areas. They simply do not arise because the conditions are not set up which make for excessively high values. Land available for certain purposes is physically restricted in relation to population in the large towns, and the increase of population in the cities tends to send the value of that land higher and higher. It may be assumed that a point will some day be reached when people will no longer pay those high prices for land, and when population will cease to concentrate upon particular cities. That has happened before in history, and there is no reason to suppose it will not happen again. Though land values are regarded as the best form of financial security, the economic effect of allowing values so to accumulate has never been investigated, and although it does not come within the scope of our present study the comment may be made that land values deserve much more serious examination by economists than has hitherto been given to them.

### § 11

The ground-rents at Welwyn are fixed at what is considered to be their market value—that is, at the highest figure that can be obtained. Sites are taken on their merits and the ground-rent is a fixed sum—there is not one price for one man and a different price for another. The advantages that the town has to offer in the way of good planning, a well-considered scheme of development, low rates, and the general amenities of the district are taken into account. No attempt has been made to dispose of land in large blocks at low rents, though sites for a number of houses at the beginning were let to public utility societies for a lower figure than would have been charged for the plots separately; but this practice has been discontinued. No land is disposed of except for immediate building. There has been no opportunity, therefore, for speculation. The earlier rents were lower than the later rents, and the tendency, as already noted, is for a gradual rise, which is to the advantage of existing lessees.

Land for workmen's cottages is disposed of at a figure which will enable the cottages to be let at the lowest possible rent. The highest market price is not sought for this land, as it is considered to be in the company's interest, that is to say in the interest of the scheme as a garden city providing for the industrial population, that every encouragement should be given to the building of workmen's houses. As these houses were not since the garden city was started capable of being built on a profit-making basis there has been no fear that any substantial amount of future site value was being lost; though it should be borne in mind that as the land used for these cottages is suitable, owing to its amenities, natural features, and traffic facilities, for a better type of residential property, a large amount of present site value has no doubt been surrendered by not putting the land to its most profitable use. The same remarks apply to the industrial land to some extent; for at least double, if not treble, the site value could have been secured for that land were it used for residential purposes. We may pause here to answer the question that may be asked, Is it sound economics to dispose of land for cottages and factories that has a higher value for other purposes? The answer is this,

that Welwyn Garden City was not designed to secure the maximum profit from the land, by developing the estate as a dormitory suburb of London, but to provide an example of a satellite town; the land being subjected voluntarily by the company to such control in the public interest as, it was contended, all land should be. The economic problem for the Welwyn Garden City Company was and still is to develop a satellite town, including industries and workmen's residential areas, in such a way as to create the maximum economic values of which such a town is capable. There is this other element to which consideration should be given in this connection: as the company retains in its own hands practically the full control of future land values in the commercial and trading area of the town, it may be found that a compensating advantage will be secured for the loss of values in the industrial and cottage areas; for it is possible that the presence of industries and the working population may result in a greater amount of business in the trading area than would be caused by a mere residential population, thus producing a greater total land value than such a residential population could bring into existence. That this reasoning has proved to be sound the substantial values that have been created in the shopping area bear witness.

It was urged that instead of being offered at the market price, the land should be offered at a fair return on cost. That is to say, for the sake of argument, if the cost of a site is £100 and a fair return is 5 per cent, it was contended that the site should be let at a ground-rent of £5 per annum (assuming, further, that such a ground-rent could be valued at twenty years' purchase). It is not right, it was said, for a garden city company to profiteer (if it be profiteering) by asking £10 or £15 for the site merely because that was its market value; the aim should be to offer the land at the lowest possible price. It did not require much argument to show that these criticisms were unsound. If a site were let at less than its market value, that is to say the price that the highest bidder will pay in a free market, the difference between its price and the market value would be a gift to the purchaser. The market price is there in any event. In other words, not only is the future increment in value lost, but a portion of its present value as well. Thus, while such a method would possibly have attracted business to the extent that the public realized that the land was being disposed of below its value, it would have possessed no other merit whatever.

All that has been said in this and the preceding section, however, is profoundly affected by the Town and Country Planning Act, 1947, which, by nationalizing increments in land value by the imposition of a development charge, entirely changes the economic process of land development. The amount of the charge is determined by regulation, which at present is 100 per cent. To consider the application of the provisions of the Act to Welwyn Garden City does not arise as the development corporation set up by the minister is to take over the town, and the corporation is not subject to the development charge. Otherwise, without relief from the incidence of the charge, the town's development, apart from local authority building, would have been brought to a standstill. As this would have been intolerable, the Treasury would have had to decide what the

treatment of the company should be; the Treasury still has to make the decision as it affects the amount to be paid to the company on taking over the estate. What the Act has done is to divert to the national Exchequer what the garden city scheme intended for the local community: what Henry George taught and the two garden cities demonstrated are lessons that have been well learned!

### § 12

As the garden city company is to pass out of existence there is no need to consider its finance any further except for one point. Though the real interest of the subject lies in the record of the early stages of the undertaking, there is special interest in the answer to be given to the question to what extent the values created by the company will receive recognition in the amount of compensation proposed to be paid by the Government. That those values were very large there can be no doubt, neither can it be doubted that they were the company's creation. As our examination has shown, they were brought into existence by sacrificing immediate profit in the early stages and by the exercise of patience and foresight due to the perception that those values were the wealth of the future town.

### § 13

The ratable value of the area originally comprised in Welwyn Garden City prior to the establishment of the town was £2,852, excluding the railway, main and branch lines. The growth in ratable value is shown in the following table, which includes the railway property, the amount of which, on 1st October 1921, was £8,518: the latter figure varied considerably from year to year, being £6,488 in 1922, and thus in the early period and a marked influence in the total figure, of which it formed a large proportion. This, however, was a declining influence as the town grew.

*Total Ratable Value from Year to Year*

1921	13,267	1932	75,620	1943	155,520
1922	14,573	1933	78,477	1944	155,380
1923	22,928	1934	86,471	1945	156,251
1924	24,157	1935	91,380	1946	157,691
1925	28,373	1936	101,832	1947	161,238
1926	30,245	1937	108,094	1948	153,929
1927	45,790	1938	117,648	The reduction in the ratable value was the outcome of the Local Government Act, 1948, under which transport and electricity properties were taken out of local rating.	
1928	63,288	1939	139,714		
1929	61,365	1940	142,821		
1930	57,183	1941	143,041		
1931	74,230	1942	153,276		

For the year 1948–9 a general district rate of 19s. in the £ was levied, of which 5s. 4½d. was for the urban district council, 4½d. for other authorities, and 13s. 3d. for the county council. A penny rate was estimated to produce £625.



## CHAPTER VIII

### CONCLUSION

. . . And the city we have described being thus established in the speediest and easiest manner, it will both be happy in itself and be of the greatest advantage to that people among whom it is established.

PLATO, *The Republic*

#### § 1

WHEN this book was first published in 1925, Welwyn Garden City had been in existence for no more than five years. It was then possible only to record the initiation of the scheme and the hopes and intentions of its founders. Though the main features of the town were settled, and though the course of its development was set, there was only expectation as to the outcome. It was evident that the site was a good one for a town, and that the place already showed what could be done on the satellite town principle to meet the demand for industrial and residential sites in the London neighbourhood. At the same time, it was being pressed upon its promoters that the most vigorous, enterprising, and business-like management was required to complete the town; for it was as a completed scheme that it could be expected to produce its desired effect. It was clear that a large amount of capital would be needed for years to come, and that while nothing could actually stop its growth, there was no certainty of the rapid completion of a substantial part of the town up to a point where revenue could meet all charges for interest on borrowed money and enable the dividend to be paid on the ordinary shares.

The record of development contained in the preceding pages shows to what extent these hopes have been fulfilled. Certainly some of them have been disappointed, as we shall indicate shortly, but time has undoubtedly proved that the town was not only securely established and that it constituted an achievement of which its promoters had reason to be proud, but to-day we can say that their faith was justified that such an enterprise was economically sound. In the previous chapter an account was given of the financial distresses through which the undertaking passed; to what extent they might have been avoided is arguable; but it cannot be denied, from any candid examination of the facts, that these distresses were not only, as we saw, not fatal, for they were borne by an undertaking that was essentially healthy, but that there was until recently every indication that the losses would be more than recovered. The promoters could not foresee that the scheme would have to be carried out in a period of economic upheaval and during long years of violent deflation.

We have seen, too, how the original plans were prepared, and we have noted how they have been modified in the course of development. Some of these modifications were good, others not. What is important in this connection is to realize that plans are not to be regarded as rigid and inflexible and that changes in them may (and indeed should)

reflect the benefits of experience and the fruits of thought as the work proceeds. To adopt and publish plans means that those concerned bind themselves, and to enter into voluntary bonds is part of the social process of free men; but there must be the means of change and development, and every plan should be regarded as provisional, and to be able to make improvements to it ought to be ensured. Of course, what is or is not an improvement may be open to dispute.

## § 2

In the concluding part of this book we shall apply what has been learned at Welwyn Garden City as well as at Letchworth in an endeavour to suggest methods by which future garden cities may be built, and in particular how the new town programme of the Government may be carried out. The value of Welwyn Garden City is that of an object-lesson in modern town-building, and the study of the place is to be undertaken from that point of view. At the same time it must be remembered that the town even in its inception was not deemed to be an ideal scheme, and what has been achieved must be judged in relation to the limitations imposed upon its promoters by their lack of statutory powers, by the initial and continuing shortage of capital during at least the first seven years, by the effects of official indifference, and by the lackadaisicalness of those responsible for affairs in this country, as well as by the practical considerations that arise when an experimental undertaking is embarked upon in which many interests and opinions have to be taken into account. With greater support it is certain that much more could have been done. A garden city undertaking was and still remains a novelty, and the steps that have to be taken, the problems that have to be faced, and the course and direction that have to be followed are unfamiliar. Although the builders of Welwyn included one or two men with experience in public works and in building and land development, yet there was no fund of knowledge to be drawn upon of the art of building towns and getting populations to them. This means that the technique had to be worked out as the scheme proceeded, and one of the results that the promoters of this first satellite town desired to see arising from their work was the foundation of the nucleus of a school of town-construction capable of teaching that technique. The company's organization was got together with the idea of working out a model administration for a garden city, and for that reason it embraced architectural, engineering, surveying, building, legal, and financial departments, and a complex of businesses all directed to the task of creating and maintaining the town as an efficient economic organism, in which first-class facilities would be provided for industrial enterprises, with houses for all classes of people, and capable of being imitated.

One consequence of the unfamiliarity of the technical and business worlds with the subject was that the interest with which the enterprise was undoubtedly looked upon was overshadowed by extreme scepticism. The general belief was that it could not be done. The times were against it, was very truly said. And only those who have been most responsible for the development of the place can realize fully the extent of the

obstacles that have had to be overcome. But apart from the unpropitiousness of the times, there was disbelief that the scheme was inherently capable of accomplishment. It was not disputed that it was a desirable thing to do, and it was as easy in 1920 as it has been at any time in the history of the garden city movement to get people to approve of the idea and to bless it with fair words; but when it came to practical support, the words remained words and comparatively few people went further. Consequently the existence of the town must be regarded as something of a *tour de force*. In the writer's opinion (it was said in the first edition of this book) the scheme should not be repeated precisely in the same way and under similar financial conditions. The promoters of Welwyn have shown that it can be done; but they have also shown that it should not be attempted again, in Great Britain at any rate, except under altogether different circumstances. It will be necessary to prepare a workable system for garden city development and finance before other garden city schemes are attempted, which is the subject to be considered in the concluding part of this book, under different circumstances, however, from those that existed when these words were first written.

### § 3

The original board of directors of the Welwyn company was brought together mainly by Ebenezer Howard himself, to some extent in consultation, but sometimes on his own account without reference to any one else, which explains its composition. Among its members were men of national repute. There was Sir Theodore G. Chambers, well known in connection with war savings and a surveyor of distinction, Walter H. Layton (now Lord Layton), a distinguished economist, Lt.-Col. Francis E. Fremantle (afterwards Sir Francis, and M.P. for St. Albans), Sir John Mann, a prominent accountant, Samuel Smethurst, a successful builder, J. R. Farquharson, an industrialist, with experience of cottage building and industry at Letchworth, R. L. Reiss, a housing expert, Bolton Smart, a director of the Letchworth scheme, Ebenezer Howard himself, and the present writer, who was already associated with Howard. As at Letchworth, after the initial impetus, Howard's influence was small.

Although this is not the place to write an account of the personalities of those who contributed to the creation of the town, something has to be said upon direction and management, which are immediately concerned with our subject. As may be imagined, the board was not lacking in ideas, and while among them were individual members of outstanding capacity, it is no disparagement of them to say that the driving force was contained in the chairman, Sir Theodore Chambers. He had joined the board of the original company, Second Garden City Ltd., in November 1919, and threw himself wholeheartedly into overcoming the difficulties that beset the scheme. He had tireless energy, a firm grasp of the essential requirements of the undertaking, and many valuable official and business contacts of which he made full use. It is no exaggeration to say that had it not been for Chambers, the company would hardly



have survived the embryo stage. To him nothing was impossible; he seized upon every detail of the work with vivid understanding, and faced the deep scepticism in the official and financial worlds with smiling enthusiasm which was irresistible. He was a visionary and idealist, but also a man of sound common sense. Above all he had what can only be described as insight into the sociological nature of town building, which included economic as well as social processes. It is only a recognition of plain fact to say that Welwyn Garden City is his creation in a sense that does not apply to any other man or even to the board as a whole.

#### § 4

There was no cut-and-dried scheme for the town's development. It had to be worked out. The board decided to set up secretarial, accountancy, estate agency, architectural, and engineering departments, and engaged men to take charge of them, and it formed various committees of its own: finance, development, building, and agricultural. For a time there was some confusion, and cross purposes showed themselves, due to the amount of work involved and the absence of co-ordination. The board attempted to get out of its difficulties by appointing the chairman on a full-time basis to take charge of general administration, and another member of the board as a full-time finance director to be responsible for financial matters and the various businesses already in their incipient stages. Under this system of joint administrative control, with the executive officers responsible to one or other of the two directors, the garden city was established and given form. Although the system was not an ideal one, it worked well, thanks to the understanding between the two directors throughout the crucial first seven years. The committees of the board were replaced by a single general purposes committee; but the restaurant company, the stores, and the builders had their separate boards. As time proved, the scheme of administration had weaknesses, but it had the great advantages of harnessing creative energy, and providing for effective action at a time when it was essential. Undoubtedly an efficient organization was created, with results that were demonstrated in the substantial basis that was laid, and in the active spirit of co-operation and family feeling that the organization enjoyed. There was free discussion of problems, and success in resolving conflicts, so that every one was enabled, if he would, to make his maximum contribution. The result was that the great difficulties that were continually being faced were overcome, the town grew, and, except for the slowness of its growth, in a manner that gave satisfaction to those who were working for it.

The weakness of the organization was that the board itself was never really united even on major policy, and in minor matters had acute differences. These were partly conflicts of personality; they partly arose, too, out of the financial predicaments that had constantly to be faced; but mainly they were caused by the semi-political nature of the enterprise. There is no need to enlarge upon the matter; it was serious, and though

the balance was maintained over a period of years, the time came when the board became so weak in composition that the balance was upset, and in 1928 the original organization was destroyed.

This involved all the activities of the company. The chairman ceased to hold his administrative position, the finance directorate was abolished, and all the departments of the company and the various businesses were affected. Though the composition of the board was altered, it was not strengthened except in number, and the consequences are to be seen in the financial reconstructions that took place in 1931 and 1934. Undoubtedly there were other factors, as we have mentioned in the previous chapter, and it may be that some form of reconstruction could not anyhow have been avoided, but it is true that not until 1935 was there any restoration of an integrated working organization on something like the pattern of the original one.

### § 5

These events are referred to because the problem of management in any complex undertaking depends upon the actions taken on the highest level, and solution of the problem is essential to success. Managerial capacity of the kind demanded by the company was, in any event, rare. No one with the required experience was to be found, and the best that was possible was to engage men to staff the concern with technical knowledge of at least one aspect of the work and possessing some qualities of leadership. It can be said that to a large extent the board was successful in this matter and that it got together a good executive staff.

Management is the central problem in all economic undertakings. Throughout industry it is at present kept on too low a level, which goes a long way towards explaining the industrial troubles of the time. But to distinguish the functions of management from those of direction is none the less essential, and the failure to do so is a major economic failure. Both are functions of leadership. Direction is the function of leadership on the level of the undertaking as a whole, management is leadership on the level of the execution of the work. To confuse the two functions, or to combine them, involves uncertainty. Direction is necessarily centralized, for it is concerned with the whole; management ought to be spread, because it is concerned with the parts. This is not to say that direction has nothing to do with the parts or that management has nothing to do with the whole; it means merely that functions should be defined. Every director should have consciousness of as many parts of the undertaking he directs as possible: he cannot know too much; and every manager should in addition to his specific job have consciousness of the whole: and he cannot have that consciousness too vividly.

The original organization of Welwyn Garden City had the merits indicated in the last paragraph, and was an efficient working organism. The board acted through two full-time directors, who functioned as directors in control of the managers, but did not

themselves function as managers, and their own functions were interchangeable. Although there might have been something to be said for changes in the persons holding the directing positions, for no one should carry out such functions for more than a limited time, and although some change in working was probably desirable, the breakdown and scrapping of the organization that has been referred to had ill effects.

There can be no doubt that some of the major mistakes of the company directly arose out of them, including the decision to curtail the width of Parkway, the failure of development in Howardsgate, and the creation of independent monopolies in public-houses and cinemas. These were all matters that affected the company in a vital sense, and have had a continuing effect. Possibly the most dramatic outcome of the change brought about by the financial reconstruction of 1934 was that the company was forced to cancel the limited dividend basis on which it was formed and to take away the interest granted to the town in its surplus profits. The abandonment of these cardinal elements in the constitution on which the company was set up was a serious structural change; but it should not be overlooked that there was much to be said for the action that was taken, necessary as these elements were in principle to the garden city scheme. Their existence had possibly led to its weaknesses. As the equity was not held by the directors, or by the company at all, the sense of final responsibility needed to be maintained for the normal conduct of the enterprise was not there. This brought about the situation in which for the sake of its own preservation the equity had to be taken over by the company. The alternative in 1934 was the prospect of the break-up of the undertaking under a receiver for the debenture holders. Instead, it was decided that the board should resume the equity and carry out the responsibility that lay upon it.

## § 6

These events provide an interesting commentary upon, among other things, the need for a new psychological approach to the economic and industrial problems of our time; to which, however, no more than this passing reference can be given here. Undoubtedly a political problem is involved; but new town building is at least an economic and industrial operation. The limited dividend basis arises to be considered in this connection. There are those who think that a limited dividend is a necessary element in our future economy, but there is not lacking evidence, to which Welwyn Garden City contributes, that such a basis may not conduce to efficiency. This is not merely a matter of human nature: it is a matter of industrial structure; for the limitation of the dividend does remove a constructive element from industrial undertakings and thus provides a sense of unreality. Only by a change in the general structure of industry and the creation of a new ground of responsibility will the operation of the principle of limited dividend become practicable. There is, therefore, no blame to be attached to the company for regaining the equity and removing the limitation of dividend from its constitution at the time that it did so, for it strengthened the hands of the directors when



they needed strengthening. In some way and at some moment the interest of the town and its inhabitants in the economic results of the growth of the town would have been re-established, so that the garden city could exist again in the full sense, and we may suggest that the fact that so much of the values created were at the time concealed and unascertained would have prepared the way to that end.

The setting up of a development corporation under the New Towns Act has now completely changed the position, which will be discussed immediately.

## § 7

Welwyn Garden City is on the same main highways and railway system as Letchworth, the distance by road between each town centre being 15 miles, and the distance by rail  $14\frac{1}{2}$  miles. It was obvious from the start that there ought to be association between the two schemes. Had it not been for the financial assistance given to Howard by two leading directors of the Letchworth company (H. B. Harris and Franklin Thomasson), he would not have been able to instruct the surveyors to bid for the Welwyn land at the Panshanger auction, and the second garden city would not have been started. At the same time, the directors of Letchworth, with one minor exception, took no interest in the new scheme, and were indeed somewhat concerned as to its probable detrimental effect upon their own undertaking. Being so near to it, and much closer to London, with a better train service, they feared that Welwyn might divert possible residents and industrialists from Letchworth. There was something in their fear, but not much. Letchworth was established, and nothing the new scheme could do could detract from the town's achievements. It is true that a few Letchworth residents, mainly from among the residue of garden city idealists, left in the place, removed to the new town, and threw themselves into its activities. That did no harm to Letchworth, and those who left it did not surrender their affection for that town or discontinue their interests in it. In fact, there has never been evidence that the proximity of the two schemes had any ill results upon either. At the same time, no benefits were realized. There was no co-operation. The board of Letchworth, though friendly, kept the board of Welwyn Garden City at a distance. This was a pity, and it is all the more to be regretted that it has continued.

The two garden cities have much in common. They are the only garden cities on the original design of Ebenezer Howard, and were expected to remain such. There will be other new towns, but, as we shall see, they will not be private enterprises. That fact alone should have drawn the two companies together. They ought to have established a common interest. In the same county, sharing many of the same services, operating on the same basis, and with the same aims, they should have drawn together and worked together for mutual support and the interchange of experience.

## § 8

Already it is possible to make at least a tentative though reasoned critical estimate of Welwyn Garden City. The analysis of the scheme made in these pages should enable judgment to be made upon the endeavour to get some degree of unified architectural control of building, the benefits of the shopping system, the results of the subsidiary enterprises, the outcome of the agricultural policy, the effect of the removal of factories from London, and the growth of an active civic sense among the inhabitants. In other words, to say whether a community has been established. The answer is that a town exists, a real town, with parts and a spirit of its own, and that what was set out to be done can be estimated in its total results by any observer.

What the scheme still offers to students of town-planning and social institutions is an example of a town in the making; and the study of its life and the plans of its lay-out, and their modification in practice, provide an education that can be obtained nowhere else. The town to-day has harmony with national habits and traditions. It re-creates in a modern form at least some aspects of the small town with its intense local life which was characteristic of England, and indeed of Europe as a whole, until the industrial revolution. There is nothing revolutionary or peculiar about it, and just as the buildings fit the landscape so its social and economic activities are of the normal life of our race and time. There persists a current of idealism throughout the scheme, without which it would not exist at all; and people who have lived there for any length of time become imbued with it and are jealous of the town's reputation. The aim has been not to make a town that should be like all other towns and so to avoid originality and anything that had not been stereotyped elsewhere; but on the other hand novelty has not been welcomed for its own sake. What its promoters and those early residents who shared their aims set before them was to visualize the town as a living organism in which a right development of all its parts and the preservation of balance and proportion in its structure was to be kept in view.

## § 9

Having brought to the last months of 1947 our story of the establishment and growth of Welwyn by the garden city company and the people who came to live and work there, we have to tell of dramatic new developments that at that point began to open. At the end of October 1947, the Minister of Town and Country Planning (the Right Hon. L. Silkin, M.P.) wrote formally to the Welwyn Garden City Urban District Council to say that he had decided to take over Welwyn Garden City as a new town under the New Towns Act, 1946. The company already knew that he had this in mind as the matter had been mentioned in January 1947, with members of the council present, and on 6th June of that year, the chairman of the company had an interview with the minister, after which, on 11th June, he wrote the minister a letter in the following terms:

In the first place, as regards development policy, we are entirely in accord with your desire that it should fall into line with the general plan for the movement of population from the London area

to New Towns in general. Our arrangements and undertakings with the Board of Trade, to which we have been working during the past two or three years, bear out our intentions, and the speeches which I have made at our annual general meetings during the last two or three years, copies of which I enclose, also indicate the extent to which we regard ourselves as being in general conformity with your current policy in regard to these towns.

With the new town-planning arrangements . . . the details of our development will presumably come under the control of the Herts County Council, but we should be more than willing to give any necessary undertakings to submit directly to your ministry all our plans for the development of the remainder of the land required for the complete town so that the development policy ultimately acted upon would be the result of general accord between the county planning authority, your ministry, and ourselves.

As regards the second of your objectives, my board are prepared to agree to enter into immediate undertakings to the following effect:

(a) That when the development of the town is substantially completed (say 95 per cent of the urban area developed and leased) the company will at any time thereafter, on the request of the Minister of Town and Country Planning, sell to the local authority or any other public authority designated for the purpose, the whole of the freehold land required for the town of 36,000 population (including all open spaces) on terms providing for an independent valuation.

(b) That, at the same time, if the minister also at that date so desires, the company would arrange for the sale to the same public authority of all the weekly rented houses owned by the company or its subsidiary housing association Welwyn Country Houses Ltd. at an appropriate independent valuation. (These are the only two undertakings which own or are likely to own in the future weekly rented houses.)

(c) That, in the meantime, the company will take steps as and when legally possible, having regard to existing mortgage arrangements and other similar contracts, to convert all leases of land held by any of its subsidiary or associated undertakings to terms of ninety-nine years wherever the existing leases provide for a longer period, thus conforming to the provisions of the New Towns Act, 1946.

The board hope that these proposals will show the extent to which our general aims coincide with yours, while still permitting the company to go forward to the completion of the work which it undertook many years ago on a basis which we believe to be entirely consistent with the policy of the Government.

To that letter the minister replied on 13th August 1947 that 'I still feel that the proposals put forward, generous though they are from the point of view of the company, leave too many objections outstanding for me to be able to accept them.' He did not indicate what those objections were, but went on to say that he intended to go ahead with the establishment of a development corporation. After that he seems to have ignored the company; but following the above-mentioned letter to the district council, he met representatives of the council and of the other local authorities concerned, including the county council, on 5th November, and the succeeding day he addressed a public meeting at Welwyn Garden City under the auspices of the local Labour party. In the course of this speech the minister said:

I have the greatest admiration for the excellent pioneering work of the Welwyn Garden City Company. I am aware of the excellent work they have done. Without the public-spirited work over a generation of those who have had control of the affairs of the company there would be no new towns movement to-day. They have blazed the trail and shown the way. . . . They have an experienced body of directors who thoroughly understand their task. Many of them have given their lives to the job. But the company would not be the right instrument for continuing the task. . . .

This company is answerable only to its shareholders and to no one else. It will be answerable



only to people with financial interests. . . . The company would not only be in a position to determine the character of the town when its development is completed, but it would also determine the character of the town while it is being constructed. It would be just what the company would like and not what the people would like. This is opposed to any sense of democracy.

The speech was well received by the townspeople, and in answer to a number of questions the minister replied that the various matters raised would be decided by the development corporation when it was formed.

It was part of the minister's scheme that the completion of Welwyn Garden City (he referred to it as the 'extension') should be carried out in conjunction with the development of the neighbouring town of Hatfield as a new town. The areas of the two towns adjoin, and the need to bring order into the disorderly growth of Hatfield was acute. It was reasonable that the minister should take the view that the towns should grow in relation to each other. He proposed that separate development corporations should be formed for each town with the same governors for each, because the combined development of the two towns could, he considered, most easily be carried out in that way. It is not, however, easy to see that the future of both towns should be made subject to one consideration only. A greater contrast than the existing condition of these two towns could hardly be found. Welwyn Garden City is the creation of planned development and public spirit, while Hatfield, containing the nucleus of an old village, which grew up under the shadow of the great Hatfield House, is an example of unplanned development and the absence of public spirit. The existence of the de Havilland aeroplane works and air-field has accelerated the development of the town and was responsible for speculative building of the most wretched description, mercifully checked by the outbreak of war.

As there was a tendency for further industrial development at Hatfield, suitable land for the purpose being available, the minister no doubt felt that drastic action had to be taken to control the future of the town. Could he bring Hatfield under the New Towns Act and ignore Welwyn Garden City? It was obvious that he could not. With the new Hatfield adjoining it, and the new Stevenage a few miles to the north, Welwyn Garden City could hardly be allowed to languish or perhaps to compete with them. He could have set up a development corporation to work with or to be more or less identical with the company; he decided against either course. No doubt the company's constitution had some influence upon him; certainly, as he said himself, he disliked private enterprise, and so decided to take the town out of the hands of the company. In doing this he brought to a stop what the company had been doing and its programme for the future. On the face of it, this was poor acknowledgment of the company's work. Welwyn Garden City existed because the company had brought it into being to show that the development of the London region could best be carried out in the form of satellite towns; and it is ironical that the response of Government, having profited by its work, was to put the company out of existence. Maybe nothing else was possible. The present writer, who thinks that the garden city company has made many mistakes in

which the future of the town has been jeopardized, is none the less of the opinion that a way should have been found to keep the organization of the company in existence and to use it for the completion of the scheme. The company could have been reconstructed, its constitution brought into harmony with the intentions of the New Towns Act, and its board could have been reconstituted to meet the minister's requirements, had there been any disposition to do so. The minister's attitude to the company seems to be indicated not merely in what he said but in his aloof attitude, for not until the Draft Designation Order was issued on 7th January 1948 was an invitation given to the company to meet officials of the ministry. At that meeting on 9th January it seems that the company received little further information as to the minister's intentions. The draft order indicated the area proposed to be taken, but the company wished to have guidance as to which of its properties were required, and on what basis the land and properties would be acquired, whether by negotiation or by compulsory purchase. On none of these matters was information forthcoming.

The minister had issued an explanatory memorandum when publishing the draft order. The memorandum dealt with both Hatfield and Welwyn Garden City, but here we are concerned only with the garden city. After a reference to Hatfield the memorandum went on to say about Welwyn:

There is, however, a special factor in this town, namely the existence of the garden city company. The company had planned to carry through the expansion of the town, and it may be that they could have found the resources to do it.

They have an experienced body of directors and a skilled staff, and they have already done excellent pioneering work in the field of new town development.

Nevertheless it seems to the minister that the time has come when the private company should be replaced by a public body.

It has already been explained that the expansion of Welwyn Garden City is an integral part of the Greater London Plan.

The creation of new towns and the expansion of existing towns in the outer country ring on the one hand, and decentralization from the overcrowded areas of London on the other, are two complementary aspects of the same policy.

A private company concerned only with expansion, and having no responsibilities for decentralization, could hardly be expected to ensure the complete co-ordination of these two aspects in the same way as they would be ensured by a public corporation created by the minister and acting in accordance with his general directions.

The minister, in any event, thinks it undesirable that a private company, however public-spirited, should, by virtue of its ownership of most of the land and buildings, be in a position to determine the character of a whole town and the living conditions of the majority of its inhabitants.

Such power, if it is to be vested in one hand, should, it seems to him, be vested not in a private concern, but in a body representing the people.

If a town is to be in one ownership, it should be in the ownership of the people of the town. This will be the position if the development is carried out under the New Towns Act, since the Act provides that when the minister is satisfied that the purposes for which a development corporation was established have been substantially achieved, he may, with the consent of the Treasury, provide for the transfer of the undertaking to the local authority within whose area the new town is situated.

Thus the minister's reasons for putting an end to the garden city company may be summarized as follows:

1. The need for co-ordinating decentralization from the London and Greater London areas with the expansion of the garden city.
2. That it was undesirable that a private company should be in a position to determine the character of the town.
3. That single ownership must be the ownership of the people.
4. That the proximity of the Hatfield new town required it.

These reasons could hardly be regarded as adequate. The minister ignored the fact that the company's aims included providing a means for decentralization, and he gave too little weight, if any, to the fact, which he admitted, that the company possessed an organization and staff to complete the town. The uncertainty in which the company was allowed to remain caused the directors to call an extraordinary general meeting of the shareholders on 6th February 1948, at which approval was given to the serving of notice of opposition to the minister's order, and the directors were authorized 'to offer the most strenuous opposition' to it at the public inquiry, unless the minister gave undertakings that the shareholders would be equitably treated. There were further resolutions authorizing the directors in negotiating with the minister to get an undertaking that the company's land and buildings to be acquired should be taken over immediately, and that should the negotiations prove satisfactory the directors should take the necessary steps to reconstruct the business remaining, and by implication, to liquidate the company.

#### § 10

The urban district council received the minister's decision to take over the town with complete approval. There were two main reasons that influenced the council. The first was that the completion of the town involved heavy expenditure on drainage and sewerage disposal, much greater in fact than the council thought itself able to face; in fact, account had to be taken of the problem of the Lee valley drainage area, and the council was glad to be relieved of the responsibility for tackling the town's share towards providing an answer to that problem. A development corporation would be able not only to finance but to provide contributions towards the initial annual charges of the drainage scheme. Indeed, the development corporation's power to shoulder responsibilities and to contribute towards expenditure on public works was the most powerful inducement in getting the council's approval. A second if minor reason was that the council was glad to have some other people with whom to negotiate than the garden city company. The council and the company had got into a condition of increasing tension in which the council felt itself to be at a disadvantage. There seemed to be no means of relieving that tension or of making it productive. There was, in fact, lack of confidence, which was growing. The reasons for this were deep-seated and are at least to some extent discoverable from a study of the relations between the two bodies, only part of the history of which has been told in the preceding pages. Of course, the company as the sole landowner and the largest ratepayer had been in a position to exert



influence and even pressure, directly and indirectly, of which the members and officials of the council were allowed to be more conscious than they liked to be. The fact is that neither the council nor its officials were equal to the task of co-operating freely with the company; their job was mere administration, while the company was concerned with the positive task of construction. The attempt to lift the council to the position of partners with the company, which was aimed at in the idea of 'civic directors,' failed, such a position could not be established, and the two bodies were not easily able to meet on a common ground. This was inherent in the situation.

### § 11

The usual procedure in establishing a new town was followed. The minister made a draft order under the Act on 7th January 1948, which was advertised; objections were received, and a public inquiry was held on 22nd and 23rd March by one of the ministry's inspectors, who was accompanied by a deputy secretary of the ministry. There were twenty objections to the order from Welwyn Garden City Ltd., Welwyn Garden City Urban District Council, Welwyn Rural District Council, Hatfield Rural District Council, the Lee Conservancy Catchment Board, the Chamber of Commerce, the Hatfield Communist Party, the Panshanger Estates, and four individual commercial firms. At the opening of the inquiry Miss Evelyn Sharp, deputy secretary to the ministry, said:

We sent a letter to the company on 19th March informing them that the ministry was willing to consider an immediate purchase. In the letter we told the company that they could dismiss from their minds the fear that if and when a New Town Corporation is set up they may be left with holdings they no longer want, or that there is any idea that they should continue in the area sharing with the new corporation the responsibilities of a ground landlord or coming between the corporation and bodies and persons holding subordinate interests.

I want to emphasize that the designation of land does not mean that all the land will be built on. The minister has made it plain that a green belt will intervene between Welwyn Garden City and Hatfield. The plans of the corporation will be made public as they go on, and will be subject to public comment and criticism. I can give an assurance that if the development corporations are established they will from time to time consult the people in the areas concerned.

With the exception of the garden city company's objections most of the objections were formal and on matters of detail. Both the Welwyn Garden City Urban District Council and the Welwyn Rural District Council objected strongly to 'Welwyn' as the name of the proposed corporation instead of 'Welwyn Garden City.' The Hatfield Communist Party, in a well reasoned objection, found fault among other matters with the proposed boundaries of the Hatfield scheme and with the non-inclusion of the area to the east of the Barnet by-pass where an extensive development of Hatfield was taking place, to which reference will be made later. The local Chamber of Commerce objected to the proposed corporation as an inexperienced body replacing the experienced garden city company. The evidence on behalf of the garden city company consisted mainly of a long, reasoned statement by Sir Theodore Chambers, its chairman, in which the fundamental merits of the minister's proposals in all their aspects were challenged and

described as undesirable in the public interest. He submitted that 'The company had shown a complete ability both technically and financially to finish the development of Welwyn Garden City in accordance with the most modern principles of town development, and to do so with the fullest possible regard to the general public interest.' He went on to say:

I cannot believe that it was the intention of Parliament that the New Towns Act should be used to destroy the organization that has been established for so many years, and is still capable of carrying on successfully the development of Welwyn Garden City, itself the very object lesson on which the whole conception of the new towns policy has been based. To deprive those who have carried the town to its present stage of what is almost, from one point of view, their birthright, is an injustice of a high order. Personally, I cannot avoid the feeling that the minister, in his memorandum, has, no doubt unwittingly, misrepresented the situation. I regret that in his speech to a meeting in the town, and at his conferences with the local authorities, he failed to make public the offer which the company made through me in June last.

This offer indicated our willingness to meet present-day political requirements and to show, as far as we could, the extent to which we regarded our work as far more than that of a business undertaking and much more in the nature of a public responsibility. If the company had merely been concerned with the financial results of its business the town to-day would have been very different, and I personally take great exception to the allegations implied in the minister's comments and by others less responsible that there is any change likely, now or at any time in the future, in the sense of public responsibility towards the company's work on the part of those associated with it. . . .

I must now briefly refer to the general question of the equitable treatment of the shareholders on the acquisition of the assets by the development corporation. The shareholders have not only temporarily given up rights to half a million pounds in consequence of the reconstruction in 1934, but have suffered a deficiency of interest during the last twenty-eight years amounting to not less than three-quarters of a million pounds. It is difficult at this date to say whether on the completion of the town the whole of this deficiency would have been made good by the crystallization of the ultimate values of the land, but it is quite certain that an appreciable proportion would have been produced. However, the whole potentiality of securing a reasonable return on the expenditure will be entirely removed by the appointment of a development corporation, which, while taking over the whole of the unleased land, will leave the shareholders with a mere claim against the Central Land Fund for that proportion of the values likely to be assessed as representing present-day development rights.

The initiation of the present proposals has thrown a bone of political contention into the affairs of the town which will certainly do the future of the town no good in itself, but which has already irreparably damaged the spirit in which the town approached the problem of its future. I may, perhaps, be permitted to express my profound regret that this act so lacking in statesmanship should have been taken with such little prior thought. It has also to be admitted that the strenuous opposition of the company over a long period of time would also not be helpful to the future of the town. The shareholders, therefore, would have a natural reluctance to embark upon this course of action despite their strong view that the proposed change is both unjust and unnecessary. . . .

Despite all the assurances which we may receive we are nevertheless faced with the destruction of a business and an organization in which we have taken great pride, both on account of its efficiency and also on account of the value of its service to the people of this country. I say without any hesitation at all that the case for carrying out this proposal does not exist and never has existed, and that the proposal, particularly in the stage which has now been reached, is more unjust even than it is unnecessary. I am equally convinced that if Parliament could have envisaged what has now arisen in our case, far greater safeguards would have been introduced into the New Towns Act, 1946. But the die has been cast, and we can only maintain our case for the equitable treatment of all those affected by the present proposal. . . .

May I now, Mr. Inspector, address to you a few final words on this matter. . . . I would wish



you to take note that in my opinion, from the point of view of Welwyn Garden City, compared with what might have arisen if the company had continued its work with the willing co-operation of every one, the new proposal may well prove a hazardous adventure. Scarcely any one will benefit by the change, whilst many will suffer some distress and even hardship. The reasons which have been given for it by the minister are both misleading and altogether inadequate, and I am bound to warn you that we, for our part, despite the goodwill that we have towards producing a result out of this present debacle which will not injure the future of Welwyn Garden City, would take no responsibility for the consequences if the proposal were to be pursued with no regard to the justice of our position. These consequences, whilst incalculable, could not, in my view, in the unfortunate circumstances be otherwise than mischievous in the highest degree.

It must be confessed that the inquiry had an air of unreality, which the terms of the minister's letter on 12th May 1948, that he had decided to make the order, did not remove. In that letter he said that he had decided to call the new town 'Welwyn Garden City,' 'for the time being, though he would propose to consider this further in due course.' The area to be designated was amended by excluding 29 acres on the western boundary, thus bringing the total area to 4,230 acres. On the objections of the garden city company the minister said:

The minister has given the most careful consideration to the representations of the Welwyn Garden City Company. He recognizes fully the company's efforts in bringing the town to its present state of development, and that in carrying out this work they have displayed a commendable sense of public duty and responsibility.

He also recognizes the willingness they have expressed to do all in their power to develop the town further in accordance with the Government's policy for the decentralization of population and industry from London; and has taken into account the offer made to transfer the whole of the company's freehold interests in the town to the local authority, or to some other public authority designated for the purpose, as soon as the task of development is finished.

While giving full weight to these assurances, the minister cannot ignore what in his view constitutes a fundamental difficulty, namely, that the duty of a private company is not and cannot be the same as the duty of a public corporation.

A company must have regard to the interests of its shareholders. A public corporation has no interests except those of the public.

The proposal for Welwyn Garden City is that there should be a major expansion carried through as part of the decentralization of London as quickly as is reasonably possible, and it seems to the minister that it must be right to use the machinery of the New Towns Act, thus ensuring that the expansion is carried through in accordance with his directions, rather than to rely on the goodwill of a company which has no such obligation.

Having reached this conclusion, the minister accepts that it would be impracticable for the company to function side by side with a development corporation; such an arrangement would, he agrees, give rise to all the undesirable features of dual control to which attention was drawn on behalf of the company at the inquiry.

He is therefore, as has already been stated, prepared in principle to arrange for a comprehensive and immediate purchase, either by the development corporation, or partly by the corporation and partly by the Welwyn Garden City Urban District Council, of all those holdings of which the company wish to dispose.

In this letter the minister did no more than to repeat his earlier statements about the inability of the company to pay regard to the public interest. The fact that the town was wholly the creation of the company was not given sufficient attention; indeed, as the minister seemed to regard the position, the company might have been incidental to and arising out of the town, not its cause. Finally let us say that the minister overlooked



the fact that motives are always mixed and that even a development corporation, which is composed of human beings, includes the satisfaction of personal interests, aims, and ambitions. It cannot therefore be said that the minister showed any sign whatever of having given the consideration to the special position of the company that was due to it. There was every indication that the ministerial mind had firmly been made up and that the company was to be brushed aside.

## § 12

In particular, the financial injury that was to be done to the company was very great. Although the minister said that the company's interests were to be bought out as soon as the company wished to dispose of them, the manner of their acquisition could not do the company justice, as under the Town and Country Planning Act, 1947, the land was to be acquired not at its true value but at its 'present use value,' the company being forced to claim upon the Central Land Board for its share of the global sum allowed for compensation under the Act. The company pressed for priority treatment for the payment of this compensation, but at the moment of writing the position was not clarified, and it was not even known if special consideration was to be given to the company's 'five years' stock' of land, which is the minimum to which priority ought to be granted. The matter is of fundamental concern to the company. The greater part of the undeveloped or partially developed area of the estate has a value shown most vividly in the commercial area, where the established value is equivalent to £60,000 an acre; but the present use value of that land is nil.

The subject is highly complicated, for there is no agreed definition of 'present use value.' It could be argued that the use value of land in a garden city should be determined by its use for the purpose of the garden city. A garden city is a scheme for the production of land for particular purposes, and land in its commercial, industrial, and residential areas, whether built on or not, has the use for which it was planned. On all the unbuilt-upon land in the Welwyn Garden City town area there has been because of that use heavy general expenditure, which ought to be taken into account. On all that land and indeed throughout the estate there are locked-up values created by the company that may be appropriated without compensation, which would be a great injustice. The position is, however, obscure at the time of writing. No compulsory purchase order has been made, and the valuers acting for the company and the ministry are endeavouring to arrive at an agreement. There are two main issues; the first is the developed and leased land and the company's own buildings, which ought to present no insoluble problems, the second is the unleased land, where contention arises. It is, however, a fact that the company's estate is a unit, the developed and leased land and the developed but unleased land, the partly developed and to-be-developed land constitute a whole. Until the Government makes clear its intentions the matter cannot further be discussed.

## § 13

The order creating the development corporation was duly made by the minister on 20th May 1948. Following his usual practice, the minister had appointed in the previous February an 'advisory committee' on the proposal to establish the two new towns. This committee consisted of the chairmen of both district councils, one other member of each of the two councils, the clerk to the Hertfordshire County Council, two members of the London County Council, and a chairman who was a director of the Co-operative Wholesale Society. In due course, on 16th June, the development corporation was set up; it included the members of the advisory committee, with the addition of one of the directors of Welwyn Garden City Ltd., who was made vice-chairman. It is to be recorded that the corporation thus became predominately Labour in composition, which is not an inherent objection to it, in the opinion of the present writer, who is not however a member of the party, but it can hardly be said to have been justified in this instance.

A curious incident occurred a week after the inquiry, when a candidate at the impending district council election discovered from a search of the council's minutes that the council had passed a secret resolution in September 1946 asking the minister to appoint a development corporation under the New Towns Act that had become law the previous month. This information, which must have been known not only to members of the council but to others, had been kept from the public and the company, and no reference had been made to it in the subsequent discussions. Why the resolution was kept secret has not been explained; it has raised more than one question, and to none has an answer been given.

## § 14

The area subject to the designation order was decided upon by the minister prior to the setting up of the development corporation. Allowing for adjustments following the inquiry the area is 4,230 acres, of which 3,143 acres are in the Welwyn Garden City estate, and 1,087 acres are in other ownerships. The whole of the garden city company's estate is, therefore, not included, in particular the land to the north of the Welwyn-Hertford road; the company will be left with this land. On the east the boundary extends beyond the company's area but does not go so far as the boundary of the land the urban district council desired to purchase in 1938 to extend the town. On the west the company's boundary is followed, and on the south a rather larger area is included. It is difficult to understand the reasons for the boundaries, especially on the east where more land should have been included, at least as far as Panshanger Park.

As we have said, the minister's action will change entirely the future of the town. Everything will depend upon the ability of the new development corporation to make good its heritage, and in particular upon the disposition of the minister to complete the garden city. The town could be finished in a few years, if the resources that should be

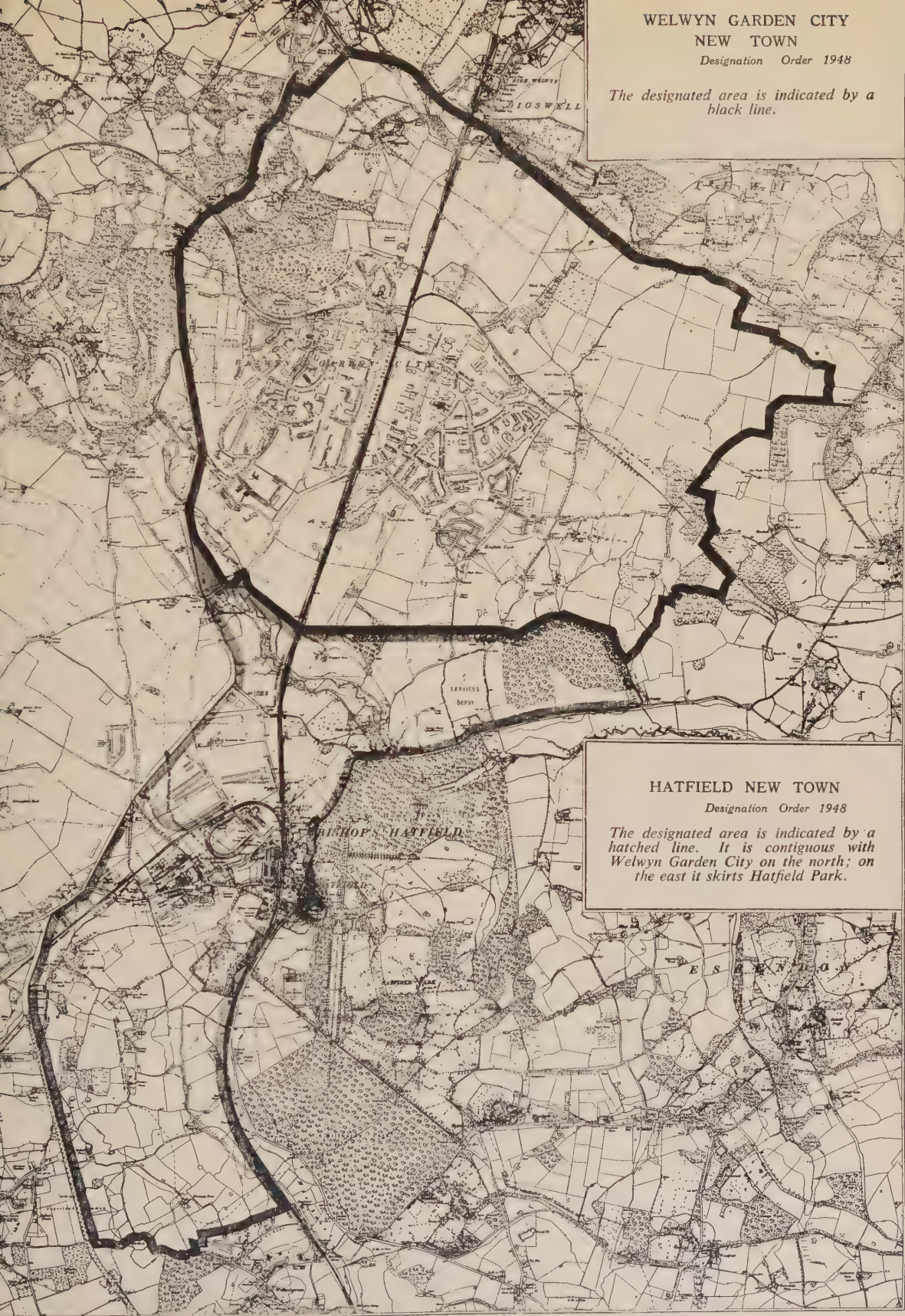


# WELWYN GARDEN CITY

## NEW TOWN

Designation Order 1948

*The designated area is indicated by a black line.*





available to the corporation are allowed to it. This would be a great gain, if the work were skilfully and conscientiously done and the original conception of the town respected.

To what extent the local authority's freedom of action will be restricted by the development corporation remains to be seen. It is hardly to be expected that both bodies will always see eye to eye, and, when differences arise, which is likely to have the better means of getting its own way? Of course, if the reconciliation of differences is attempted, a definite advance in relations will have been made.

Certain advantages will come from the disappearance of the garden city company. The public-house monopoly and the cinema monopoly will both be ended, which is to be regarded as satisfactory. The predominant position of the Welwyn Stores will be shaken, though it is likely to remain the largest retail establishment in the town. The development corporation will have the benefit of the garden city company's pioneering work with regard to shops, and if it is wise will not throw the valuable results away.

### § 15

As the development corporation may acquire the land at much below its true value (thus starting on what must be regarded as a false financial basis), and will not be subject to development charges under the Town and Country Planning Act (which in the present writer's opinion is right), comparison of its future operations with those the company might have carried out may be found to be difficult. With all the resources and priorities available to it, the corporation ought theoretically to be able to finish the town within a few years, bringing its development to the highest standard of completion.

But it is to be feared that the corporation will have fundamental handicaps, among them its subjection to the directions of the ministry and the financial control of the Treasury. At the start the Treasury scale of salaries was said to be too low, and the appointments of the leading officers were individually subject to the personal consent of the minister. Such interference indicates that while the corporation will bear responsibility it will have restricted freedom of action. There appears to be the intention, as we shall discuss in the next part of this book, that the planning and development of all the new towns, including Welwyn Garden City, are to be under the direct and constant supervision of the ministry. This can only lead to a situation in which the completion of Welwyn Garden City, instead of being handled as a business enterprise governed by practical empirical decisions and fluidity of control, will be subject to a rigid administrative system in which delay, uncertainty, and the inability to get adequate consideration of questions that concern not merely the day-to-day business of the corporation but policy, in both of which the public will be interested, will predominate. Furthermore, the extent to which the town will be made to serve the interests of the London boroughs and the London County Council in their problems of decentralization cannot at present be foreseen. There exists the possibility of the development corporation being overwhelmed with directives that may involve the sacrifice of the

essentially varied character of the town, the distinctive garden city features of which may altogether be lost. Finally, the question arises, Will the economic basis of the garden city in the use and conservation of the land be maintained, or will it be dissipated and lost? The questions that wait to be answered are in fact innumerable.

### § 16

So far as he had any politics at all, Ebenezer Howard was a Liberal. He did not believe in the State or think it right to depend upon State action. He thought that people by their own efforts could provide what they needed for themselves, and looked upon his garden cities as co-operative communities, self-founded, built by the efforts of industrialists, workers, and people of good will. To placate his Socialist friends he acknowledged that in the distant future the State might take a hand, but he did not really welcome it. Of course, when it came to the point, anything that enabled many garden cities to be built would have received his support, but there can be little doubt that he would have fought with all the fanatical energy he possessed against the Government taking Welwyn Garden City away from the company.

### § 17

The building of such a town as Welwyn Garden City, and of many other towns on such a plan, was never thought of as a panacea for our national ills; but in helping to make industrial conditions more wholesome by establishing factories in good surroundings and building houses where a decent life may be lived, and by making a town in which its inhabitants could individually and collectively enjoy order, fitness, and harmony in public and private buildings, something of moment has been done to show the way to a better England. Indeed, to show the way out of the awful and increasing congestion of London, and the endless building of suburbs; to indicate how an organized exodus of industry from the cities may be achieved; and to demonstrate how communities should be planned and developed to secure the maximum social and economic advantages for their inhabitants, is what is most urgent to-day.

In our desperately repeated and wellnigh hopeless attempts to deal with the housing problem the lesson of the garden city was disregarded until recently and is still not fully digested. Had a small part of the sums of money which were expended on housing with very little satisfaction to any one during the period covered by the history of Welwyn Garden City been used to make garden cities we should now have a very different England from what exists. The men who took upon their shoulders the responsibility of founding Welwyn Garden City have the satisfaction of knowing that when at last that is attempted, as now it may be done, those who do it have no need to work in the dark.

## § 18

The following note is added as these pages pass through the press. On 14th March 1949 the company announced that agreement had been reached between its valuers and the Central Valuation Office acting on behalf of the development corporation on the value of the garden city estate within the designated area, the factories, shops, and all weekly rented houses to be taken over by the corporation. The unleased land had been included on the basis of present use value only, subject to a claim upon the Central Fund. The company's statement said:

The company has not yet received any specific undertakings as to the extent to which it will be awarded any priority for its claim but, consequent upon correspondence between the chairman and the Chancellor of the Exchequer, the directors have decided that the fair assessment of the company's unquestionable right to special treatment should be left in the Chancellor's hands.

Thus the remarks made in the preceding pages on this crucial subject still hold good, neither the principles to be applied nor the nature of what is to be valued having been settled.

The amount of the agreed purchase price is approximately £2,800,000, and the company has adopted the figure of £500,000 'as representing the minimum amount which the company in equity ought ultimately to receive' in compensation for its development values. The company is of course left with its subsidiary trading undertakings, including Welwyn Stores Ltd. and Welwyn Builders Ltd. To deal with the position a new parent holding company, Howardsgate Trust Ltd., with a share capital of £1,000,000, is to be formed to control these subsidiaries; and the original company, Welwyn Garden City Ltd., is to be liquidated, the shareholders receiving approximately 37s. 3d. in shares of the new company for every £1 share in the original company. It is further estimated that, after meeting all liabilities, including mortgages and bank advances, the costs of liquidation and the expenses of reorganization, a sum will remain that will permit the distribution of at least 22s. per share in cash.

This is the most that can be said at the present stage. It means that the original shareholders (a minority) will recover, approximately, in shares and cash, 6s. out of every 18s. they had lost, while the original debenture and stock holders (the majority of the shareholders) will receive a bonus of 39s. 3d. on every £1 they had invested. There is no need to discuss this situation further; what the writer has already said ought, however, to be kept in mind as bearing on the subject.



PART IV

THE PRACTICAL PROBLEMS  
OF BUILDING NEW TOWNS



## CHAPTER I

### THE BUILDING OF NEW TOWNS AS NATIONAL POLICY

Now, if parliamentary powers are necessary for the extension of railway enterprises, such powers will certainly be also needed when the inherent practicability of building new, well-planned towns . . . is once fairly recognized by the people. To build such towns, large areas of land must be obtained . . . far larger than that occupied by our first experiment. . . . EBENEZER HOWARD, *Garden Cities of To-morrow*

#### § 1

IN the first part of this book the argument for building satellite towns as an alternative to city extensions was set out, and in the second and third parts an account was given of the two such towns that have been established. In the final part to which we have now come it is proposed to discuss how new towns may be built in the future, and to indicate their place in regional planning and development.

The subject is more than of academic interest, for the policy of building new towns has been adopted by Government. This attempt, therefore, to discuss some of the problems of their building and to indicate what may be learned from the two original experiments is intended to have bearing upon the large schemes that are now being taken in hand.

#### § 2

When relating the story of the founding of Welwyn Garden City in the preceding chapters, something was said about the efforts made after the first war to get the lessons of the garden city understood and a policy of new towns accepted. It was because neither the Government nor any local authority would then do anything, nor indeed would any large landowner whose interests might have been thought to be involved, that Welwyn Garden City was started. It was done as an object lesson to show the way.

While the town was in its incipient stages, therefore, strenuous efforts were made by its promoters to draw attention to what had been attempted at Letchworth as well as to the purpose of their own scheme. This feature of the object lesson ought not to be overlooked; for it had effects upon what the promoters did, and how they did it. They acted as it were under the public eye. They did not embark upon their enterprise as upon their own private affairs, and their efforts to get what they were doing understood and brought to public attention had relation to the larger implications of the scheme, which were ever kept in view. After the Welwyn scheme was initiated, but before work was started upon it, the Prime Minister sent a small deputation privately to the Continent to make a report on the garden cities there, which, as noted on an earlier page, had barren results. That deputation did, however, make a report, and part of the material prepared for it is contained in the notes at the end of this book. Following upon this



report the Government inserted in the Housing (Additional Powers) Act, 1919, a section giving powers to the minister to acquire on behalf of any local authority, including a county council, or two or more local authorities jointly, or an authorized association, land for a garden city in accordance with a scheme supported by the minister. For the first time the garden city was recognized in legislation, but it was no more than an addition to the fair words that were habitually given to the garden city. No action was taken under it, and when later Welwyn Garden City as an authorized association endeavoured to get the minister to acquire or to negotiate on its behalf for land that it was agreed was required to complete its scheme, there was no willingness on the part of the department to implement the terms of the Act.

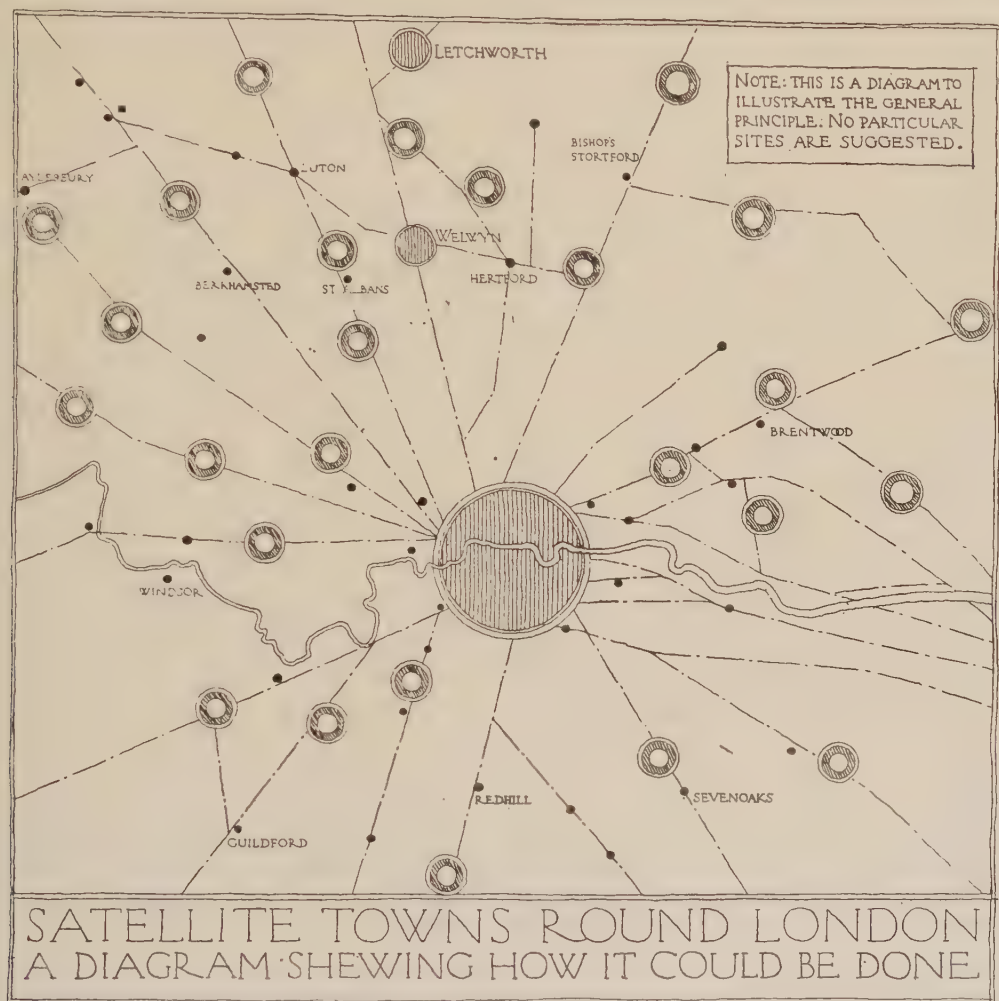
Early the next year (1920) a committee under the chairmanship of Neville Chamberlain was set up by the Minister of Health, Dr. Addison, to consider and advise on the principles to be followed in dealing with unhealthy areas, and the committee, which contained one of the directors of Welwyn, quickly reported, in March 1920, recommending 'the establishment of self-contained garden cities in the open country surrounding London to which industry might be moved and where new industries might be established,' and proposed that loan assistance should be given to such schemes by the State.

### § 3

To illustrate the application of the idea of satellite town development the present writer prepared a plan, which was published in *Garden Cities and Town Planning*, in May 1920, showing a series of twenty-eight new towns around London, in addition to the two garden cities. The plan was a diagram only, and was drawn up to indicate what not every one familiar with the region had realized, that there was room within forty miles of London for a very large population, which could be provided for without making London any bigger and without disfiguring the countryside or destroying the villages.

The Letchworth and Welwyn garden cities, which are shown in the diagram, are only thirteen miles apart, and it was noted that there was room for another garden city to be placed between them. The proper development of the area between the two garden cities would have been to plan a new town of 40,000 inhabitants or thereabouts, for which there was an excellent site, and at the same time check the prevailing haphazard development of the country near the old small towns and villages in the district, which was proceeding to the future great detriment of the area. Had that been done, the rural character of this part of Hertfordshire, still one of the most charming pieces of country near London, would have been preserved and accommodation would still have been found for a large population. The site indicated, or near it, has been selected for the Stevenage new town, but since 1920 there has been much unsatisfactory building between it and Welwyn Garden City and much of the damage that was feared has taken place.

There was no further outcome of these efforts nor of the recommendation of the Chamberlain committee, except that in the Housing Act, 1921, power was given to advance loans to associations for developing garden cities. This power, repeated in subsequent legislation, was of help to Welwyn Garden City, but was not otherwise brought into use.



## § 4

Ten years later, after housing had been forced and retarded, retarded and forced, by successive administrations, and much building had been done in the wrong places and in the wrong way, the then Minister of Health, the same Neville Chamberlain, created in November 1927 the Greater London Regional Planning Committee. The minister said in addressing the committee that what was expected of it was consideration of the

possibility of 'development in particular spots and areas by the establishment of new towns. . . .' But the committee was a hopeless means of achieving such an object. It consisted of the representatives of local authorities within the London and Home Counties Traffic Area, roughly the area within a radius of twenty-five miles from Charing Cross, covering an extent of 1,846 square miles, and a population at that date of 8,653,559. The representative of the city corporation was its chairman, the services of certain of its officers were granted by the ministry to the committee, and Raymond Unwin, retiring under the age limit from his post in the ministry, was made its technical adviser. Such a body could not be expected to take any action of the kind desired by the minister, and it was characteristic of the political attitude of the time that the minister did not realize the fact, or, realizing it, did nothing about it. Chamberlain was no Utopian, but there was evidence that he believed in the garden city and thought the times favoured that solution of the social problem; possibly, had he been given more time, he might have seen that more than good words was devoted to it.

After a year's work the committee issued a somewhat ineptly compiled report in December 1929, containing various memoranda by Unwin on open spaces, ribbon development, and the additional town-planning powers required, with other material; but it was a poor result. The report did, however, show the serious position of the region in relation to open spaces; but no reference was made to the main object in the minister's mind. In fact, to build new towns was the last thing that any local authority, even the London County Council, was prepared to contemplate. Within five years after its inauguration and before a second report was ready, the local authorities withdrew their contributions from the committee except for a token sum, so that the staff was dismissed and the office closed; the technical adviser carried on for a time at his own expense until the committee was abolished in 1937. This was a ten years' story of lack of seriousness by all concerned.

## § 5

While this committee was drawing out its nominal existence, a departmental committee was set up in July 1931 by the then Minister of Health, Arthur Greenwood, under the chairmanship of Lord Marley, 'to examine the experience already gained in regard to the establishment of garden cities and villages and satellite towns,' and to make recommendations. Owing to the political situation, the committee did not meet until almost a year after its formation, and, in leisurely manner, did not report until December 1934.

This committee met twenty times over a period of two and a half years, but, although its terms of reference were inclusive, its report gave no sign that it had attempted any thorough examination of the subject, or of the experience gained at Letchworth and Welwyn. Its conclusions were unexceptionable:

We advocate the fullest adoption of the type of development usually associated with the idea of a garden city.

We do not believe that . . . arguments for higher buildings and increased density can be accepted



as valid . . . the time is ripe, and is favourable for the serious consideration of more fundamental methods.

That when a town reaches a certain size, which may vary within wide limits, continuous growth around the fringe may create evils that outweigh any advantages; that at this stage in its growth any further outward development should take the form of complete planned units, each having due provision for industry, residence, social services, and recreation.

That these units or satellites should be in definite connection with the parent town though separated from it and from each other by adequate spaces of open land to serve the needs of both.

These amiable commonplaces did not lead to constructive proposals except that a Planning Board should be set up to study and survey the problems of land development and redevelopment throughout the country, and to seek to secure proper distribution and co-ordination of development. The committee saw no importance in maintaining the terms 'garden city' or 'satellite town,' because 'the broad principles of what may be termed the "garden city" type of development have been generally accepted by town-planners throughout the world,' which indicates that the committee's own ideas were not clear. Perhaps the Government thought little of the report, for it took over four months to publish it; anyhow, nothing was done.

## § 6

In the interval that followed, the Special Areas Commissioner, Sir Malcolm Stewart, drew attention to the continuous movement of industry into the London region; and, as an outcome, the policy of Government-sponsored trading estates was adopted; but Sir Malcolm took no interest in what was meant by the garden city, though his attention was drawn to the subject, and his trading estates ignored housing conditions and everything else but the one task of providing sites and buildings for new industries.

## § 7

As an outcome of the attention directed to the centuries-long process of the overgrowth of London, the then Prime Minister, Neville Chamberlain, appointed in July 1937 the Royal Commission on the Distribution of the Industrial Population, which, under the chairmanship of Sir Montague Barlow, prepared the famous report of December 1939. The committee worked at a time of great political tension, and worked slowly, but did its work well, for it attempted a thorough examination of the problems of urban expansion for the first time in this country. No specific recommendations for garden cities were made in the Barlow report, but the commissioners' conclusions as a whole confirmed all that was implied and much of what was explicitly stated in the case for garden cities. In brief, their unanimous conclusions were that national action was necessary for the redevelopment of congested urban areas and the decentralization or dispersal both of industries and industrial population from such areas, and that the continued drift of the industrial population to London and the Home Counties demanded immediate attention. Further, they agreed that a central

authority was required to formulate policy and to plan for decentralization, in which garden cities and satellite towns were to be included; also, that municipalities and authorized associations should be given the opportunity for dealing with the problem, though the commission suggested that municipalities only should have financial assistance from public funds. Among other things, there was agreement that the proposed central authority should be required to collect information and give advice to Government, local authorities, and industrialists upon industrial location. Finally the commission agreed that the Government should appoint a body of experts to examine the question of compensation, betterment, and land development generally. When, however, the commission came to formulate its conclusions into the terms of specific recommendations, there was admitted disagreement among its members, and they therefore confined their recommendations to the establishment of a National Industrial Authority to deal with the location of industry on the lines proposed, with compulsory powers, and with instructions to prepare a special report on redevelopment, decentralization, and the encouragement of a reasonable balance of industrial development throughout Great Britain. There was a dissentient memorandum on planning in relation to the location of industry by Professor (now Sir) Patrick Abercrombie, in which he pointed out the inadequacy of town-planning legislation. Altogether, the report, which is a mine of information, came to a somewhat lame and uncertain finality, indicating the wide divergences of political opinion on the subject of land, the failure to overcome which had been the cause of the futility of town-planning as hitherto practised.

## § 8

But what was contained in the Barlow report was regarded seriously by those in authority, for the social and economic evils disclosed in it were not in dispute. Though preoccupied with the war, the Coalition Government took certain action. In January 1941 Lord Reith, then Minister of Works and Planning, appointed under the chairmanship of Mr. Justice Uthwatt the expert Committee on Compensation and Betterment that had been recommended in the report, which very quickly made an interim recommendation that the Government should affirm the general principle that payment of compensation in respect of the public acquisition or the public control of land should not exceed the standard of values at 31st March 1939, with the object of checking speculation in land, especially land affected by war damage. This recommendation was adopted, but was afterwards used in ways not contemplated by the committee, and with effects that were not always just. The committee made it clear that it was working on the assumption, which no doubt the minister had given its members, that a central planning authority would be set up, and it recommended that all building developments throughout the country should come under that authority. Lord Reith affirmed the principle of national planning in February 1942, and his successor, Lord Portal, reaffirmed it in the following April. It was clear that the Uthwatt committee had a

grasp of the subject and was working on lines indicated in the Barlow report. Its final report, made in August 1942 and printed the following month, was a masterly survey of the subject of compensation and betterment within the terms of the committee's reference, and a state document of the highest importance. Its main recommendation was the nationalization of development rights in land. What it had to say about land values and land use was in harmony with the ideas on which the garden cities had been founded, and the influence of those schemes was traceable in the report. Much controversy was aroused by the proposals, but while the conclusions to which the committee had come were regarded as unassailable, the Government would come to no decision with regard to the action to be taken, and not until the Town and Country Planning Bill was introduced by the Labour Government in 1947 was any attempt made to deal with the fundamental problems with which the committee had been concerned.

### § 9

Lord Reith appointed another important committee on Land Utilization in Rural Areas in October 1941 under the chairmanship of Lord Justice Scott, 'to consider the conditions which should govern building and other constructional development in country districts.' That committee's report, made in the following July and presented to Parliament in September 1942, was a first-class survey of rural planning without projecting attention too far into the future. On the subject of garden cities and satellite towns, the committee commended the original ideas of the founders of the garden city movement, and specifically recommended 'that new satellite towns, housing estates, garden cities, and suburbs should be sited wherever practicable away from the better farm land,' and that in their siting 'due attention be paid to agricultural considerations.' Thus negative and positive considerations were balanced; but apart from questions of design and care for rural amenities, the committee did not discuss the fundamental contribution that towns on the garden city model might make to agricultural industry and rural life, which was a shortcoming in the report. A useful discussion on green belts was contained in it and an attempt was made at definition, which ought to be taken note of by planners. The specific recommendations in the report, as far as they go, are in harmony with what is aimed at in garden city policy in relation to agriculture.

The reference to green belts draws attention to the London County Council's green belt for London, a scheme initiated in 1935 and given legislative form in 1938. This was an attempt to apply to the London region an element in the garden city idea, but in a way that can only be regarded as making nominal acknowledgment of it. The need for stopping building around London had been shown in Unwin's report to the abortive Greater London Regional Planning Committee; but the green belt did not stop building, and was not intended to do so. What it did was to keep certain blocks of land free from building, usually by agreement with the owners, the effect of which was to increase the attractiveness and building value of adjacent land. It was in no sense a planning



measure, though it provoked as much building as it discouraged. What effect it might have produced was held up by the war, so that the unreality of the green belt did not disclose itself. Its existence was recognized and given definition, however, in the Abercrombie report on Greater London, as we shall see.

### § 10

Arising out of the destruction brought about by the war, plans for the reconstruction of London were prepared and the influence of the garden city is to be recognized in the County of London Plan (1943), prepared for the London County Council by its then architect J. R. Forshaw and Professor Patrick Abercrombie. Again through Lord Reith, the Government appointed in August 1942 Professor Patrick Abercrombie to prepare a plan for the Greater London region, afterwards published as *The Greater London Plan, 1944*, in which the argument for satellite town development was made the leading theme of a comprehensive survey of an area of 2,599 square miles, extending approximately thirty miles from the London County Council's boundary, including the whole of the counties of Middlesex, Hertfordshire, and Surrey, and parts of Kent, Essex, Bedfordshire, Buckinghamshire, and Berkshire. Excluding London, the region had an estimated population of  $6\frac{1}{4}$  million.


The report showed the extent to which the ideas of decentralization of population demonstrated by the garden cities had taken hold of the official mind. Its leading motive was to discourage the further growth of industry and population within the London region and to provide for the better distribution and grouping of what was already there. In this it followed the conclusions arrived at in the Barlow report. No less than 1,033,000 persons were proposed to be 'decentralized,' 618,000 from London, as proposed in the Forshaw-Abercrombie London Plan, and 415,000 from congested areas in Greater London, a total figure that might under certain eventualities be increased to 1,232,750 persons.

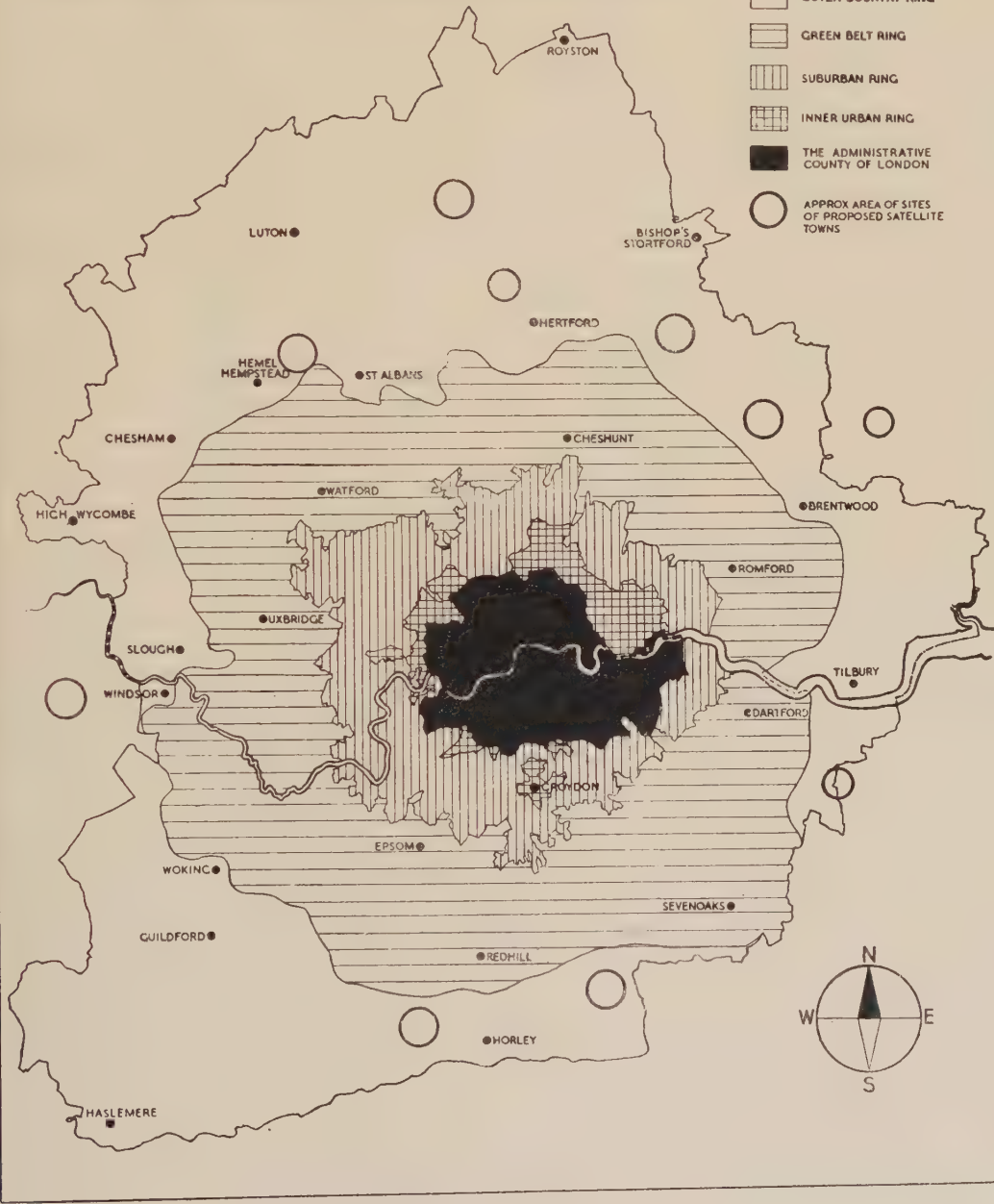
In the plan, the recognition of four concentric rings was proposed: (1) the inner suburban ring, comprising the built-up areas adjoining the London County Council area, in which there should be no further building, but from which there should be decentralization; (2) the suburban ring, comprising a further area to be regarded as fully built up, except for building on vacant frontages; (3) the green belt ring, comprising land extending for about five miles beyond the second ring, to be retained primarily for recreation and where only small increases to existing towns were to be allowed; and (4) the outer country ring, comprising the remainder of the region, the principal area for the decentralized population and where eight new satellite towns were to be built; otherwise the agricultural character of the land was to be maintained. To carry out the plan, the establishment by Parliament of a planning board was proposed.

# GREATER LONDON PLAN

## THE FOUR RINGS



-  OUTER COUNTRY RING
-  GREEN BELT RING
-  SUBURBAN RING
-  INNER URBAN RING
-  THE ADMINISTRATIVE COUNTY OF LONDON
-  APPROX AREA OF SITES OF PROPOSED SATELLITE TOWNS



## § 11

This is not the place in which to discuss this report and plan in detail. It carries further the principles of the County of London Plan, which the present writer has discussed elsewhere (see *How Should We Rebuild London?* Dent, second edition, 1947). Within the terms of maintaining the existing urban structure, the Abercrombie report is a most able piece of work. Reference here will be confined to the specific proposals for building satellite towns, which is the structural basis of the plan, containing its most novel features. Sites for ten satellites were indicated, from which it was suggested eight might be selected for development. The ten sites were as follows:

<i>County</i>	<i>Town or Site</i>	<i>Estimated Mid-1938 Population</i>	<i>Proposed Population</i>
Berks.	White Waltham	—	60,000
Essex	Chipping Ongar	3,000	60,000
"	Harlow	3,000	60,000
"	Margaretting	—	30,000
Herts	Stevenage	7,000	60,000
"	Redbourn	—	60,000
"	Stapleford	—	25,000
Kent	Meopham	—	40,000
Surrey	Crowhurst	—	60,000
"	Holmwood	—	60,000

The small existing populations in some of the places named were neglected for the purpose of this table.

What Sir Patrick said on the specific subject was as follows:

The choosing of sites for new communities is always an exhilarating side of the planner's work: it is impossible to escape from the sequel that opportunity is to be offered for the creation of a town which will embody the latest ideas of civic design. The London region is fortunate in possessing two such new communities, Letchworth and Welwyn, both due to the genius of the late Ebenezer Howard. Recent research tends towards a somewhat larger unit than Howard proposed: but no increase in density. The population figure which we have adopted is 60,000 as a maximum: this would suggest seven new towns within the London region, but as in the case of several sites, there are populations already on the ground (but not large enough to constitute an enlargement of an existing place . . .) there would be eight of these new communities in the London region. On the plans accompanying this report ten possible sites are shown from which the eight proposed could be selected. The others would allow a certain amount of latitude in the ultimate selection of sites and would also be sufficient to meet increased decentralization from the central areas if the lower density of a hundred were adopted. In order to arrive at sites which can be recommended from the industrial development aspect and which do not unduly offend against agricultural requirements or invade rural amenities which are necessary to London as a whole, we have examined sites in the Outer Country Ring. It is perhaps needless to add that the sites which we have chosen are capable of economic lay-out and can be provided with the necessary public services. We have made a study for a new town on one of these sites.

He went on to say that considerable difficulty was found in suggesting satisfactory sites for so many as ten new towns. This was, he said, because of the 'unbridled rush of building' after the first war, when there was 'a scamper over the Home Counties, practically uncontrolled by the so-called planning control.' The main requirements were



that the sites had to be well served by road and rail, and to have sufficient land suitable for industry. The sites proposed by Abercrombie may be compared with those suggested in the plan made twenty-four years earlier by the present writer. Although some of the sites in the earlier plan are now too much built up to be of use, others are still available, and it might be practicable to find more elsewhere. No doubt, as Sir Patrick said, population and industry in the past have selected the best centres; but it was mostly done before the railways were built, and when road transport was not developed, and the best site has almost always meant land that happened to come into the market for the speculator to exploit. Though planning is difficult to-day, it is not impossible, and what is required has to be carried further than planners, even Sir Patrick, are at present prepared to go. Of course, for these first towns, 'good accessibility to the metropolis is absolutely essential,' in Sir Patrick's words, for they were intended to serve immediate needs. As satellite towns they were to rely upon London and to share in London's life. Three of the sites were existing centres, the others were new areas.

To show what was intended by a satellite town, a detailed study was made of one of the proposed sites, the results of which its author suggested should be compared 'with the existing and successful "new" town of Welwyn Garden City.' Why he should put 'new' in inverted commas is not, however, clear. He took Chipping Ongar in Essex, a large village  $21\frac{1}{2}$  miles from Charing Cross, at the terminus of a railway line, about to be electrified, which Sir Patrick proposed should be extended to Chelmsford. The main London-Chelmsford road ran through the village, and this road would have had to be re-routed. The site was cut into three natural divisions by the river Roding and its contributory, the Cripsey brook. It contained several parks and numerous woods and the hamlet of Greensted. The existing population was 3,000. A civic centre was placed in the proposed plan about the old town and castle, and six neighbourhood units each containing 10,000 people were proposed, with an overall density of 30 persons per net residential acre. Each neighbourhood was to be separated from the next by a park strip. Playgrounds and playing fields of 540 acres were proposed, on the basis of 9 acres per 1,000 of the population. The site was an attractive one from a residential point of view; the old village is very pleasant, there is an interesting church, and two fine parks, which were intended to be kept. An industrial area was planned on the north-east, requiring the extension of the railway to serve it. The town could be sewered, it was said, without difficulty into the Roding valley. The subsoil was partly sand, gravel, and clay. Of the total new population of 60,000, it was proposed that 54,300 should be decentralized persons. One of the principal advantages claimed for the site was its nearness to the overcrowded areas of West Ham, Leyton, etc., for this purpose. The minister has, however, turned down the site because of 'acute railway difficulties.'

Thus, it is clear, real satellite towns were intended, built on the general scheme of the garden city, and, with the carrying out of the Abercrombie plan, it could have been said that the object with which Letchworth and Welwyn Garden City had been established would at least partially have been fulfilled.

## § 12

The Greater London report was published on 13th December 1944 for official use and put on sale to the public the following year. The Coalition Government took no action beyond seeing that the local authorities in the area were requested to consider the report, but, through Lord Woolton, the Government rejected the idea of a central planning authority, going back on its earlier decisions, though it set up a Ministry of Town and Country Planning, thus detaching town-planning from the Ministry of Health, where hitherto its administration had lain. Before the Government disappeared it passed, in June 1945, the Distribution of Industry Act, which was supposed to give some effect to the recommendations of the Barlow Committee upon the control of industrial location. The Act was mainly concerned with provisions relating to the development areas, but it contained certain general provisions as to the distribution of industry, requiring persons proposing to erect new industrial buildings exceeding ten thousand feet of floor space to notify the Board of Trade. No powers of control were created, however.

## § 13

When the Labour Government came into office one of its early acts was to appoint the New Towns Committee under the chairmanship of Lord Reith, who ought to be remembered as the ministerial parent of the Abercrombie reports and of the general schemes that had as their outcome the creation of the Ministry of Town and Country Planning. This committee was appointed on 19th October 1945 with the following terms of reference:

To consider the general questions of the establishment, development, organization, and administration that will arise in the promotion of new towns in furtherance of a policy of planned decentralization from congested urban areas; and in accordance therewith to suggest guiding principles on which such towns should be established and developed as self-contained and balanced communities for work and living.

The committee got quickly to work and submitted three reports in rapid succession, in January, April, and July 1946, which was evidence of a business-like approach to the subject and appreciation of its urgency, and the reports contained the results of great industry. The committee recommended in its first report that the Government should decide upon the situation and boundaries of new towns, that it should have powers of compulsory purchase of sites on behalf of the town development agencies, and that the sites should include the whole of the proposed built-up area and a surrounding belt. Each scheme for a new town should be treated separately and one agency should be formed for each to be responsible for planning and development with no other responsibilities. A Government-sponsored public corporation financed by the exchequer was regarded as the most suitable agency, but corporations sponsored and financed by local authorities, and authorized associations formed by interested persons, were also regarded as appropriate agencies.

The Government-sponsored public corporation should, the committee proposed, have freedom of action comparable with that of an ordinary commercial undertaking, subject to direction on matters of major policy; it should hold the freehold or *fee-simple* of the site; advances made to it should if necessary be subject to deferred payment of interest in the early years; it should be put on the same footing as local authorities for receiving subsidies and grants; and the location of industry should keep in step with the building of new towns. A central advisory commission was considered necessary. The need for fresh legislation was pointed out and the nature of the legislation was indicated. The development of Stevenage as the first new town was discussed. In the second report the land policy, the building development, provision of industrial facilities, public services, finance, and local government were discussed and recommendations made. The final report dealt with the planning of the towns and the execution of the plans.

The committee favoured entirely new towns, but did not rule out the possibility of extending old towns. The population suggested for each new town was 30,000 to 50,000. The agency should itself provide houses and facilitate building by local authorities; it should also provide industrial facilities and premises, and build premises and let them to traders at competitive and progressive rents; the freehold was to be retained by the agency, no leases being granted 'for more than ninety-nine years unless the circumstances are exceptional,' reversions being made to coincide in any given area so as to facilitate the redevelopment of the area as a whole; and the ownership of shop and other commercial premises should be retained.

The three reports were detailed and owed practically their entire contents to what was to be gained from the study of, and what had been written about, Letchworth and Welwyn Garden City, except for such details as district heating, of which the garden cities know nothing. Reference will be made to what is said in the report on particular subjects in later chapters of this book.

#### § 14

The New Towns Committee had the unusual experience for a Government committee of finding the Government taking action even before its final report was signed, for the Minister of Town and Country Planning introduced the New Towns Bill into the House of Commons eleven weeks beforehand, and the Bill became law on 1st August 1946, a week after the date borne by the final report.

In introducing his Bill, the minister put the subject on the basis of urgency, but the urgency was that of getting a lead in building to prevent the almost calamitous results that followed after the first war. 'Were the new houses now to be built on the outskirts of our towns with the same lack of planning as they were after the last war?' he asked. It was a speech that in certain respects could have been expected only from a garden city idealist and was a novelty from the Treasury bench. The minister said that it was estimated that the cost to public funds for each new town would be about £19,000,000,



of which £15,500,000 would be spent by the corporation and £3,500,000 by the local authority building the houses. He made reference to Letchworth and Welwyn Garden City, but though he said they were 'admirable,' his remarks were disparaging, for neither, he said, had developed as anticipated, both were still dormitory towns, and both had not wholly succeeded, principally because of lack of money and absence of powers for compulsory purchase of land. That the two garden cities are dormitory towns in any other sense than it was anticipated that they should be, and to the extent that it is desirable that they should be, is not, of course, a fact. As for lack of money and absence of powers, that was true enough, but whose was the responsibility but that of politicians who praised the schemes but stopped there? It is strange that the minister was not better aware that the case he was presenting for his Bill was word for word the case for garden cities that had been stated and restated since Howard published his book in 1898, since Letchworth was founded in 1903 and Welwyn Garden City in 1920. The New Towns Bill was the culmination of the efforts made by enthusiastic and devoted people, who, so far as they were still alive, had the satisfaction of seeing their arguments accepted, their example followed, and national policy formed on their two garden cities, for what is to be learned from them, their failures as well as their achievements, will provide guidance for the new towns, which surely is a kind of success not to be despised.

There was no opposition to the Bill except what was offered in a nominal sense, though particular details were hotly assailed in committee, including especially the powers of the minister, which were very wide indeed, the basis of compensation, and the terms on which land was to be disposed of. The minister resisted the attempt to bring authorized associations within the scope of the Bill, saying that the Government considered that they were unnecessary, and argument to the contrary was not effectively presented. The Bill had an easy passage through Parliament.

### § 15

The New Towns Act, 1946, the text of which is printed at the end of this book, provides for the creation of new towns through the agency of development corporations formed and financed by the Government. It specifically provides for (a) the acquisition of land as the site of a proposed new town, (b) the creation by the minister of a corporation to develop the town, each corporation to consist of a chairman, deputy chairman, and up to seven other members, all of whom will be appointed by the minister after consultation with the local authorities concerned, (c) the duty of a corporation to obtain the minister's approval of its plans for development, (d) the power of a corporation, with the consent of the minister, to acquire land either by agreement or compulsorily, (e) the power of a corporation to grant leases up to ninety-nine years, (f) for local authorities to arrange with the corporations to build houses for them and for such houses to attract the Exchequer subsidy, (g) for houses built by a corporation otherwise than at the request of a local authority to receive the same Exchequer subsidy,

(h) for capital expenditure required by a corporation to be met by way of advances from the Consolidated Fund made by the minister with the approval of the Treasury, (i) power for the minister to make grants with Treasury approval towards the expenditure of a corporation on revenue account, and (j) certain other provisions relating to public health, drainage, and other matters, including the winding up of corporations when their purpose has been achieved.

Authority is given under the Act for advances from the Consolidated Fund up to £50,000,000 to enable the new towns' programme to be started; this sum is estimated to recover requirements for about five years. The period will be reduced if the programme is actively pursued. It is estimated that grants payable by the minister towards the expenses of a corporation will average from £30,000 to £40,000 a year for each new town during its first five years of existence.

### § 16

Following upon this great legislative effort, the Labour Government proceeded to recast the entire treatment of town-planning throughout the country, as it was bound to do in the need to deal with the question of compensation, which was holding up the reconstruction of cities and town-planning in general. This was effected in the Town and Country Planning Act, 1947, which repealed all earlier town-planning legislation, and adopted the Uthwatt committee's proposals of nationalizing development rights, though not in the way the committee put forward. Under that Act, town-planning was made the responsibility of counties and county boroughs, a development charge was instituted with the object of appropriating increments in land value, and a Land Board was set up. The reference to garden cities in earlier legislation was repealed and no similar provisions were made in the new Act.

### § 17

At this point the question properly arises, How did it come about that the garden city proposal for new towns as the alternative to the expansion of cities was at long last adopted as national policy? It is too much to suppose that it was the outcome of the experimental work that went into the two pioneer garden city schemes, although that work no doubt played its part, for such a result would be too rational for British politics. There can be little hesitation in coming to the conclusion that the decision was forced upon Government as a defence measure in preparation for the third war. One of the lessons of the second war was the need for the dispersal of population and industry. Germany first adopted the method of dispersal for its armaments plants prior to and during the war, and we followed. The large war factories built during the war were placed in country areas, well hidden, and workers were brought to them by road and rail from their homes. At an early stage of the war, development of aerial warfare showed the danger of large concentrations of population, and the danger increased until the atom bomb demonstrated what enormous destruction and loss of life could be caused

even by a single bomb. The decision that large centres of population must be broken up followed.

Of course, before the second war, the possibilities of aerial attack upon the big cities were well known, and the desirability of planning new towns instead of allowing land speculators and the municipalities to extend the old towns was pointed out. The matter was ignored as such matters always are in this country where people will rather die than think. They would rather let their towns be smashed to pieces than make the effort to build differently, to control speculation, and to plan in advance. Now, however, it has to be done, and the new towns policy was accepted by Parliament (though nothing was said to admit it) because it was a necessary preparation for the coming war. Only by spreading people and industry could there be the slightest chance of this country surviving under attack by the new forms of aerial warfare.

Yet how lackadaisically are the preparations being undertaken! London and the great cities are doomed; but we move very slowly, as though time were on our side. Of all the great powers England is by far the most highly congested in population; it is also the smallest in total area. Whatever other countries do we must disperse and put an end to high concentrations of population. We need how many new towns to enable this to be done? Nobody knows. Certainly the few towns that are in the early stages of their development make a negligible contribution to meeting the national need. Probably ten million people need to be dispersed from London, Birmingham, Leeds, Manchester, Liverpool, Newcastle, and Glasgow, which would mean 200 new towns of 50,000 each. It would be no easy matter to find sites for them in this crowded country; but it could be done, and, shall we say, must in fact be done? This is one of those questions to which the answer 'Impossible' cannot be entertained. If it has to be done, have we not to make preparations on an altogether different scale from those the Government has now in hand? Even with their few new towns the methods adopted to site, to plan, and to develop them are so half-hearted, so doubtfully competent, that progress will be snail-like and the results we may fear to see. The problem ought to be regarded as a major operation on a scale beyond anything the State has ever contemplated in peace or war. It should be envisaged as involving planning of a kind to put in the shade anything that has been contemplated by the most avid advocate of nationalization. It should be understood to affect every district, every industry, and directly or indirectly every citizen. While in its serious implications it may have the appearance of being the outcome of counsels of despair, in fact it should be accepted as a means of revitalizing this country and putting it on a level of modernization to place it in the forefront of the countries of the world. Two hundred modern towns built with all the resources of science in housing, public buildings, health services, and social amenities, with factories and workshops on the most modern design for small industries as well as large ones, and with the arts given scope such as their workers have never enjoyed before, would transform this old country and remake it.

Have we the technical ability, the imaginative energy, the constructive minds, the



operative skill, and the mere man-power to carry out such a scheme on any reasonable time-table? The answer the present writer wishes to make is, yes, if the ability, skill, and energy of the people of this country were set free.

This may have all the appearance of phantasy; it may equally be our only chance of survival. The point is that what we are doing is next to nothing. It does not compare even with the daring that was put into the building of Welwyn Garden City after the first war.

## CHAPTER II

### THEIR SITING AND ORGANIZATION

The problem of city planning, as of chess, is to improve the situation by as far as may be turning its very difficulties into opportunities. PATRICK GEDDES (1917)

#### § 1

No one can have followed the progress of the Letchworth and Welwyn garden cities as they have been described in the preceding pages without being acutely conscious of the difficulties that faced the promoters at every stage of the development of their schemes. While it is possible to account for them in one way or another, it is clear that eventually it must be agreed that those difficulties belong to the nature of the schemes themselves. A town is a highly complex organism; and the building of a new town, apart from the need to overcome the idea that towns are merely natural growths, not only requires considerable capital and technical resources, but appears to demand a degree of patience beyond (it is supposed) the capacity of human nature, and calls for such wide understanding of men, and such consciousness of social processes, as is perhaps equalled by no other human activity. To build a town is nothing less than to make a community; and a community is at least as full of psychological problems as a child. It is of course an artificial thing to do, that is to say it depends upon the fine and useful arts; for that reason it is not fanciful, but should be regarded as belonging to man's rational activities.

Fortunately the difficulties of building new towns have kept speculators from embarking upon them in search of the theoretically large profits available. Yet the idea of founding cities has appealed to kings and bishops and even municipal councillors in the past, and the present writer had the idea when writing the first edition of this book that it might still attract a speculator of genius, who might be tempted to use it for grandiose schemes to arouse the excitement of the world, as it has been aroused before by dreams of wealth in railways, gold-mining, and land speculation. It is impossible to set any limits to genius; but failing its appearance, there has never been, perhaps fortunately, any likelihood of a spontaneous popular movement towards the building of new towns, involving the possibilities of bad planning, inadequate public services, exploitation of the public on a large scale, and a host of minor evils that would but add to the confusion in which our towns at present lie. Though we have had little to congratulate ourselves upon after all; for from what do our towns suffer but the effects of indifferent, haphazard, and vulgar building, which continue with but slight and short-sighted attempts at municipal control? And if there have been no garden cities that are failures, there have been plenty of speculative land developments masquerading under that name, and many more speculative ventures that have done little more than to increase the difficulties of urban life.

## § 2

The problems of new town building are complex, for they are the problems of the conception, birth, youth, and adolescence of a community. The idea behind a new town is important because it determines its conception, the way in which the scheme is worked out decides its birth, and the handling of its initial development conditions its growth and completion. A new town is a building development, but it is much more; it is a means of housing people, but much more; and it is a trading estate, but much more. The merely technical problems are those of its lay-out, building, and public services; but in addition to the technical problems there are the social problems of the establishment and growth of a community in which the highest qualities of civilization are involved. Unless this is accepted the significance of what is being done will not be perceived and the result will suffer. A community is an artificial thing; it has to be built up; it has to grow but its growth is not merely natural, and certainly in none of the new towns will it be natural. It has necessarily to be the result of thought, preparation, design, and intention, and the quality of the community will depend upon the quality of the thought, preparation, design, and intention put into its making.

In this chapter it is proposed to deal with the following parts of the subject within the limits that are practicable, taking account of the experience of the two garden cities: (1) siting; (2) organization; (3) land use and management; (4) housing; (5) how the building should be done.

## § 3

Choosing the sites for towns involves questions of regional and national planning. There ought to be a national plan within the scope of which should come the means of considering the preliminary aspects of the subject. There is no such plan, and its absence causes difficulties in the use of land for all national purposes. At present, Government departments requiring land for any object act as though they had the freedom of private persons with the ability to do as they please and to override all other interests, backed up by the compulsory powers of the State. No system could be more anti-social in its operation and effects. Its results are to be seen in controversies about the use of land for military purposes, controversies that are rarely settled in a manner that leaves the conviction that the public has been rightly served. What the present Government hopes, taking its cue from the declared policy of the Coalition Government, is that the plans prepared by the new planning authorities recognized in the Town and Country Planning Act, 1947, will in the aggregate constitute such a plan. This, however, is not the place in which to present the argument for a national plan prepared in a different manner, except to say that what is required is not a rigid plan to control the future of the country but a means by which proposed land uses can be examined from the point of view of the nation as a whole, so that nothing that should be considered is overlooked, and so that judgments can be made in which the national interest is observed.



Conditions change, life is dynamic and creates new demands, nothing can finally be settled, and we should look into the future realizing that it is unknown; so that to have a plan in any static sense would be to fetter ourselves hopelessly. None the less, a plan there should be.

What has been attempted in the absence of such a plan indicates the need for it. In the Abercrombie report eight new towns were proposed in the London region, and to consider this and other proposals the minister arranged to have set up, in October 1945, an Advisory Committee for London Regional Planning, 'to co-ordinate local views,' and that committee, among other things, in a report dated July 1946, cut down the number of new town sites to three, Chipping Ongar, Harlow, and Stevenage, rejecting the others, and introducing a new recommendation of its own for a new town at Laindon and Pitsea in Essex, for a population of 50,000. In an undated memorandum published in 1947 the minister accepted the rejection of the sites at White Waltham, Margaretting, Redbourn, Stapleford, Crowhurst, and Holmwood, reserved his decision with regard to Meopham and Laindon-Pitsea, rejected also for the time being Chipping Ongar, accepted Harlow and Stevenage, and added to them a Crawley-Three Bridges site, introduced by another body, the Greater London Interdepartmental Committee; he also agreed to the expansion of Hemel Hempstead into a new town. The minister stated that he had before him the recommendations of the interdepartmental committee for the expansion of the towns of Newbury, Aylesbury, Bletchley, Chelmsford, Witham, Basingstoke, and Ashford, and some other places with which we are not concerned here. Since then, in October 1947, the minister announced his intention to take over the completion of Welwyn Garden City, making it a new town under the Act, and to set up a new towns corporation for Hatfield. So that the position at the time of writing as an outcome of this uncertain process of action is that there are to be the following new towns in the London region:

<i>Town</i>	<i>Existing Population</i>	<i>New Population</i>
Stevenage	7,000	60,000
Harlow	3,000	60,000
Hemel Hempstead	21,000	60,000
Crawley-Three Bridges	7,000	50,000
Welwyn Garden City	18,000	36,500
Hatfield	9,750	25,000
Basildon (Laindon-Pitsea), Essex	22,000	60,000
Bracknell, Berks	5,000	25,000

The changes of programme indicated in the above paragraph show that the subject is complicated; they show too that there is not always success in the reconciliation of differences, and that a constructive view does not always prevail. Of course, there should be discussion, and changes of mind are not to be condemned, but too hesitating a rate of progress seems to be implicit in present methods of handling the subject.

As the New Towns Act was for the country as a whole, sites are being considered elsewhere, and the minister has put in hand a small scheme for 10,000 at Aycliffe, in

south-west Durham, utilizing a disused ordnance filling factory for the industrial nucleus, and another Durham scheme at Easington, near the coast, to be called Peterlee, for 30,000. Sites in Lancashire are to be decided upon, and in December 1948 a scheme near Pontypridd, South Wales, was announced. In Scotland, where the Secretary of State for Scotland is the responsible minister, four new towns are projected under the Department of Health, at East Kilbride (Lanarkshire), Leslie-Markinch and Lochgelly (Fifeshire), and Coylton (Ayrshire).

In view of the large numbers of new towns to be built, twenty in the current programme, with prospects of many more, the selection of sites is a matter of the utmost seriousness. New towns built on wrong sites would be the most harmful form of development imaginable; not only would public money be wasted, but what is more important, damage would be done to the structure and form of national life. The selection of sites for this purpose ought to be the task of a body especially equipped for the purpose. The sites for the two garden cities, Letchworth and Welwyn, were decided upon without reference to any national or regional plan because none existed; they were the best sites that private persons could find acting on their own initiative, and to some extent depended on land coming into the market. Fortunately the sites were good ones. To leave this matter of primary importance to committees of civil servants and interested local authorities or to the ministry is too haphazard: it should be given a more constructive basis.

#### § 4

The factors to which consideration have to be given in the selection of sites include (a) position in relation to existing centres of population, particularly in relation to congested cities and the need for dispersal; (b) communications: road, rail, water, and air; (c) the area available including an agricultural belt, in which account is taken of agriculture; (d) existing buildings and land use; (e) suitability for industry, and the kind of industry; (f) water supply and means of drainage; (g) existing public services; and (h) local authorities.

Although the Abercrombie sites have mostly been rejected, what Sir Patrick said in his report on the subject deserves to be re-read:

Some considerable difficulty has been found in suggesting satisfactory sites for the necessary number of new towns in the country belt and within a reasonable distance of London. The placing of these satellites should be such as to ensure their successful establishment; they should be well served by both rail and road and near to either existing trunk roads, or, if this has not been possible, to proposed express arterial routes. They should, however, not be intersected by such main roads as these create dangerous traffic conditions and cut up the town. Again, the siting of a town on a small branch line has been avoided unless it can be reasonably foreseen that electrification, track widening, or other projects have a likelihood of being carried out. Suggestions have been made that it might be possible to create new loop-line railways to enable satellite towns to be adequately served. As this would involve considerable delay in the obtaining of the necessary powers, and in constructing them, and in view of the already large numbers of existing railways in the region, and the great expense involved, also of the undesirability of having to change at the junction station, we do not favour the proposal. Certain sites have insufficient industrial land, though otherwise suitable.

A large number of sites have been examined . . . the most careful consideration has been given to the location of all sites from the point of view of agriculture. Attention has also been paid both to the views of and the views from the town sites in determining how they will fit into the landscape. In one or two cases possible sites have been rejected on the grounds that they would have intruded into well-known scenic or recreational areas. Another point worthy of notice has been the proximity to important wireless transmitting and receiving stations and to aerodromes. The effect upon radio reception has been considered both from the point of view of the receiving station and of the listener. The erection of buildings within the gliding angle of aircraft and also the effect of noise have been studied. The availability of the necessary services, such as gas, water, and electricity, has been considered, and also the problem of the sewerage and drainage. . . .

The amount of ground which a new town will cover has also made it more difficult to find sites. It has been necessary too not to cause an overbalance of population in any particular locality to the detriment of existing towns, and this in some cases has influenced the size which it has been thought possible to aim at. Strategically situated sites sufficiently far from existing towns to ensure the maintenance of an adequate green belt are not easy to find. It will generally be found that population and industry have in the past selected the best centres, such as road and railway junctions; many of these towns have now almost reached their maximum population limit. Consideration has been given as to whether it is better to expand existing town nuclei than to embark on entirely new sites. Sometimes the existing town centre is quite unsuited to expansion on a big scale. The enlargement of a small town almost inevitably implies control of, if not outright purchase of, existing property in order that wasteful development shall not impair the completion of a satisfactory lay-out. There would appear to be room for both types of town and both are suggested.

It should be emphasized that these towns must retain an intimate link with London and that good accessibility to the metropolis is absolutely essential; but they should be sufficiently far out to deter people permanently from travelling backwards and forwards (this was a point made by several industrialists). The towns will, however, rely on London for their major amusements and important cultural activities. But they must not be regarded as dormitory residential towns and this affects their location. So much industry is linked with the midlands and the north that location on through lines is most desirable. Those on the south of London are only really suitable for industry serving London and not materially linked with the north. In spite of a swift traffic ring, the built-up area of London will remain a transport barrier to any industry with northern linkages settling to the south of London. In selecting sites, close regard must also be had to the normal trends of outward population movement, and this has influenced our choice. The East End population could be very much more easily dealt with if decentralized to the east or north. If taken to a town on the south-west, they would probably have a sense of isolation. It was felt, for instance, that the total number of persons to be moved out did not warrant the establishment of more than one entirely new town in Kent.

## § 5

That existing small towns might be made the nuclei of satellite towns has often been discussed, but is generally not to be approved from the garden city standpoint. Large villages of 2,000 population sometimes offer what appear to be attractive possibilities of enlargement, for they often occupy good sites; this is true of four of the new towns, while the new Hemel Hempstead and Basildon are the extensions of old towns, as of course is Hatfield. But the advantages of existing town sites are largely illusory because to expand them into fifty or sixty thousand people means a total change in structure. Nothing the original village or small town has will be found sufficient for the purposes of the large town, neither its lay-out and road structure, its centre, its public



services, nor anything else will do. For these reasons, its traditions are of no value and its character contributes nothing. The greatest difficulties of all are the disturbance to the lives of the existing inhabitants, and their dislike of the inevitable changes that must be made. This was well illustrated at Stevenage, which has a population of 7,000. The people rose up against the scheme, and many were made unhappy at the prospect of their little town being overwhelmed by a great influx of newcomers. As it was necessary for the sake of the proper execution of the project that the entire land holdings included in the area should be brought into a single ownership so that control might be made effective, every inhabitant was given notice of the compulsory purchase of his property. Interests of all kinds had to be taken over. This was naturally disliked by all who had such interests. Those who had none did not, of course, object, and people who had no houses of their own, of course did not mind. We shall tell the story later on. The same objections arose from property owners at Hemel Hempstead and Crawley-Three Bridges in due course. The Reith committee had decided that 'the balance of advantages lies with new towns on relatively undeveloped sites,' and there can be no doubt that the committee was right.

## § 6

When the inquiry took place into the proposed new town of Glenrothes, in a mining area in Fifeshire, between the two small towns of Leslie and Markinch, the site for which was designated by the Secretary of State for Scotland, a contrary argument was put up by objectors. It was claimed by them that a better site would be the burgh of Markinch as it would be an advantage to base the town 'where there was civic pride already, whereas in an entirely new town it had to be built up.' This is an unusual argument, and in view of what is said above not to be accepted; indeed the building up of new civic pride is one of the specific objects of new towns.

That new towns in the London region should be accessible to London is part of the general problem of communications. If the new towns did not have accessibility, they would be deficient in communications and the siting would be wrong. The objection to people travelling backwards and forwards, which is made much of by Abercrombie, in the quotation from his report, is surely wrongly based; for communications cannot be made too easy, and the regular movement of population from the new towns to London and vice versa is an advantage rather than not. It should be made easy and inexpensive to get into London from the new towns, for the resources of the metropolis should be made available to them. London should gain from lightening the congestion of its population; and business and entertainment, as well as the educational and other cultural resources of the city, should benefit. The new towns will be satellites of the great city, therefore dependent to some extent upon it, and the interflow of population should be provided for. The minister has said emphatically that he is opposed to the new towns being 'dormitory towns,' which is excellent; but a certain degree of dormitory usage the towns should none the less possess.

To base the selection of sites upon the natural movement of population throughout the country is certainly no disadvantage, but too much emphasis should not be placed upon it. What is called a 'natural trend' may be and usually is no more than mere necessity. Only too often people go where they can and must, not where they would choose to go had they any choice. In view of the co-operation of the local authorities in the building of the new towns to provide the housing for which they have not the sites within their boundaries, it is necessary that the new towns should be within easy reach of them. This is a matter of common sense; it means in practice, for instance, that boroughs on the south of London should be interested in new towns in the south of the region, boroughs on the east in new towns on the east, and so on.

### § 7

Few sites will have all the modern means of communication available; many will have one or more. It is not, however, to be overlooked that all existing communications except water, which has largely fallen out of use, and air, which is still in the early stages of development, are overburdened and need modernizing: this applies forcibly to roads and rail. Thus the new town at Stevenage will throw traffic upon highways and a railway already overcrowded, neither of which without further reconstruction and development will be able to cope with it. There can be no doubt that a policy of dispersal will increase transport demands; it is not likely to reduce them, though it should reduce excessive peak demands with which no system seems able to cope. At this point we are confining attention to the selection of sites, and are led to the conclusion that the provision of improved transport by road and rail ought to be envisaged. This is a matter to be taken account of in the scheme for new national highways, and with the reorganization of the railway system. It points once more to the need for a national plan.

### § 8

The area required for a new town was dealt with to some extent in both the Abercrombie and the Reith reports. In the former, the needs of the various functional parts were dealt with, but there was no indication of the total areas required for any of the proposed new towns. Of course, the area required for any particular town depends upon the population for which provision has to be made. In the Reith report the areas in relation to population were given as follows:

<i>Intended Population</i>	<i>Built-up Areas</i>	<i>Peripheral Belt</i>	<i>Total Area</i>
	<i>Acres</i>	<i>Acres</i>	<i>Acres</i>
20,000	1,650	3,850	5,500
30,000	2,500	4,500	7,000
40,000	3,300	5,000	8,300
50,000	4,200	5,500	9,700
60,000	5,000	6,000	11,000

The subject was discussed by the present writer within brief limits in an appendix to *How Should We Rebuild London?* where the following figures were given:

<i>Population</i>	<i>Built-up Areas Acres</i>	<i>Rural Belt Acres</i>	<i>Total Area Acres</i>
20,000	800	5,600	6,400
30,000	1,200	8,400	9,600
50,000	2,000	14,000	16,000
100,000	4,000	28,000	32,000

Obviously the definition of the area depends upon what is included within it. The Reith committee assumed an overall population or gross density in the built-up area of twelve persons to the acre, while the present writer assumed double that number. The Reith committee was prepared for loose residential development, while, from the experience to be derived from Letchworth and Welwyn Garden City, more compact development seems to be desirable. The comparable figures of the built-up areas of the garden cities, each for a population of 35,000, were:

Letchworth	1,876 acres
Welwyn Garden City	1,601 „

These areas included residential, industrial, and commercial uses. It will be observed that there was a marked variation: Letchworth, the earlier scheme, intending to use 17 per cent more land for its built-up area than Welwyn Garden City, though the Welwyn figures were for part only of the town. The figures may be brought together as follows:

POPULATION PER ACRE IN THE BUILT-UP AREA			
<i>Letchworth</i>	<i>Welwyn</i>	<i>Purdum</i>	<i>Reith</i>
18.6	21.8	25	12

As everything depends on what is included in the built-up area, and it is not easy to arrive at what is intended, the figures are not fully comparable. The Letchworth and Welwyn figures appear to include, as does the present writer's figure, the land built upon in the town area plus roads and small parks; open spaces and playing fields are excluded. What is included in the Reith figure is not clear. The idea of the Ministry of Town and Country Planning is that 1,000 acres of built-up area should be allowed for each 10,000 population; but this includes parks, open spaces, and playing fields, everything except the agricultural belt: it is a very generalized figure.

The point of drawing attention to these differences is to emphasize that the built-up area should be compact, which depends upon the plan. What is of no less importance is that there should be adequate provision for parks, open spaces, and playing fields, and an adequate agricultural or green belt. Small parks, tennis courts, bowling greens, and small children's playgrounds should be included in the built-up area, but playing fields and the major open spaces should be outside. The Reith committee considered that an average depth of three-quarters of a mile around the built-up area was sufficient for an agricultural belt; but this was to treat the agricultural or green belt as possessing no more than a nominal existence. In the green belt there should be placed playing fields, open



spaces, and some of the town's institutions, such as some schools and hospitals; and there ought to be the intention to bring agriculture into close contact with the town. This would mean a considerable belt of agricultural land, and the total site area should, therefore, be much larger than the Reith committee proposed.

The committee considered that the rural belts for the new towns could be maintained by planning control, and said no more of the matter than that 'This surrounding belt [of three-quarters of a mile width] is not, however, intended to include the whole of the green belt area over which planning control should be exercised.' The ministry's idea, as expressed by Mr. Gordon Stephenson when its chief research officer, was that the green belt could be safeguarded by planning and that its purchase for inclusion within the scheme was not necessary. This is to be regarded as a mistaken point of view; for although under the new Town and Country Planning Act, planning control will be more effective than it has been hitherto, the use and development of land will still be ultimately a private interest, which, so long as it exists, will have to be respected. Unless private initiative in land development is to be obliterated, which does not appear to be the intention, when land comes into the hands of a developer it will not always be easy to resist his proposals, and building may be agreed to that is not socially desirable. It is difficult, of course, to change our ideas so far as to envisage agriculture as within the sphere of urban interests, and to conceive of its land as a constituent element in town lands; but it has to be done. The matter is returned to in a later chapter; at this point we are concerned with the total area of land required for a new town, which, it is contended, should include its rural belt for the sake of effective control.

## § 9

Existing buildings on the site and the existing land use have to be considered. Property in private ownership may have to be brought within the scheme for the sake of ultimate control. This will ordinarily not interfere with its use, and it should be leased to the owners on terms that cause them no loss. The uses of other property may have to be changed; this will be decided in the plan. As the difficulties in dealing with existing property will be great in any event, and much increased when the uses have to be changed, sites ought to be chosen as free from building as possible, which supports the argument that existing towns and villages should not be included. The greatest changes will be those that will fall upon agriculture. Here, it is sufficient to say that the existing agricultural values of land considered as a site for a new town must be seriously weighed, and the observations of the Scott committee that have bearing upon the subject are pertinent. Hitherto, where land has been required for any public purpose, the interests of agriculture have been lightly regarded; but this is a wrong policy, which should be reversed.

## § 10

Up to the present the designation of the sites for the new towns has been made by the minister prior to the creation of the development corporations, so that their areas are decided upon by the department before the corporations are in being. It is on the basis of the minister's draft order that the minister's inquiry into the scheme is held. The corporations, when formed, may acquire the land and properties included within the area covered by the order at such times as they think fit, and may acquire additional land extending the area originally designated. Therefore, at least theoretically, years may pass before land comprised within an order is acquired and adjoining owners may not know to what extent they may be disturbed. The position is not satisfactory, for it creates uncertainty, which cannot provide favourable conditions for the scheme. Much more thorough consideration should be given to the area required before the draft designation order is made than seems so far to have been given, and while the occupation of land and buildings should not be interfered with unless, and until, it is necessary, owners should not be left 'in the air,' so to speak.

What influences the minister in deciding upon the area to be designated is not always easy to understand. For instance, at Hatfield 2,340 acres were selected, but the extensive industrial and housing development to the east of the by-pass was excluded, and the area to the south seemed unnecessarily restricted. Hatfield Park was excluded for reasons that can be appreciated.

## § 11

The suitability of the site for industry is of the first importance. This means that all forms of transport facilities must be adequate, that the land must be level for factory building, that public services must be sufficient, and that labour must be available. In fact, all the requirements of a trading estate, which have received some study in recent years, have to be met. Heavy industry is excluded from most sites by the need to be near the sources of raw material; but a large part of industry can be sited anywhere, the main factor being labour. The question of the kind of industry for which given sites may be suited has to be examined.

An adequate water supply is required either from an existing supply or from a new source. Also the site must be capable of being drained without undue cost. Much dispute arose at Stevenage about these matters, but both water and drainage depend upon regional and even national considerations; when that is remembered solutions can usually be found. The problem is, of course, a serious one in the London region, especially where the river valleys are involved from which London draws much of its water. New towns inevitably bring the need to deal with industrial waste, which is a much more serious matter than ordinary sewage, and the problem ought to be faced much more practically than is being done. Modern industry, even when regarded as

clean industry, almost invariably has waste, which even if not large in quantity may be of a difficult nature to deal with. For instance, at Letchworth, a corset factory, which is one of the cleanest of industries, has a small amount of waste, which has involved the firm in claims for compensation from farmers for causing the death of cattle. The sewage effluent from Letchworth flows away from London; but Welwyn, Stevenage, and Harlow are in the Lee basin. All the new town sites in the London region will have this problem arising.

The subsoil and aspect of the site must be suitable for good living conditions. If of gravel, sand, or brick-earth, the subsoil will play a part in aiding the building of the town. Public services such as electricity and gas supply for the industrial and domestic needs of the intended population have to be provided either by supplies from works in the district or from new works.

The local authority areas are important. Sites will be in country districts. If in more than one county, which will not often occur, there will be complications to be met, or if in the area of more than one rural district, which will frequently occur, other and much more easily adjusted complications will also have to be overcome.

## § 12

At the same time as the suitability of the site is being considered, or immediately a decision has been taken, a preliminary plan has to be prepared on the available data and a superficial examination of the site, indicating the total area and the approximate use-areas, because without such a plan the area to be designated cannot be settled. The intention is that this plan should be made by the ministry or by a consultant on its behalf. At this early stage the question is raised of the need for a central commission or board for new town building to undertake this and other preliminary work. That it should be undertaken by the minister himself either by his own officers or through a consultant is not satisfactory, for he is responsible for the administration of town and country planning generally, and for making regulations under the New Towns Act, and there are not sufficient outside consultants competent to do the work. At present the work or some of it that such a central organization should do is performed by a department of the ministry, but that is to carry centralization to the extreme. The Reith committee proposed that a Central Advisory Commission should be set up to provide a central pool of information and experience and to advise the minister and those responsible for the new towns, but no provision was made for such a body in the Act, which must be regarded as one of its weaknesses. Were regional authorities in existence they would be suitable agencies for undertaking the preparation of the preliminary scheme; but the aid of an experienced central board would be of the greatest value in the preliminary stages. In view of the large scale of the operations, the many interests affected, and the specialized skill and experienced judgment required, it is to be hoped that the minister will not delay in its creation.



## § 13

When a map showing the area has been prepared and the size and general character of the proposed new town have been indicated, the minister makes a draft order, and is required to publish in the newspapers a notice describing the area to be designated, stating that the draft of an order under the Act has been prepared, naming a place within the area where a copy of the draft order and map may be seen, and specifying the time (not less than twenty-eight days from the publication of the notice) within which objections may be made. The minister has also to serve a copy of the notice on the county council and the local authorities concerned.

Thus every one is intended to be informed, so that doubts can be removed and objections considered. If any objection is made to the order, the minister is required to hold a public inquiry, when objectors can appear and make their statements before an officer of the ministry, who may question them, and who afterwards reports to the minister, who is required by the Act to consider it. The minister then may decide either to abandon the scheme, or, if he thinks fit, to make the order with modifications or not. Having made the order designating the new town the minister must publish it in the *London Gazette* and the local newspapers, serve it on the county council and the local authorities concerned, and upon the objectors, and deposit it in a suitable place within the area of the proposed new town where it can be inspected by the public.

## § 14

It may be of some significance to recall how in the first new town the action outlined in the last paragraph was in fact taken. The proposal to build a new town at Stevenage was made in the Abercrombie report, and the Government decided to make it the first of its schemes, intending to carry it out under the Town and Country Planning Act, 1932, and the later legislation relating to land acquisition. The urban district council was thereupon informed, and the minister attended a meeting at which he told the inhabitants what was intended. When the order was drafted, the owners of property within the area were served with notices of compulsory purchase under the provisions of the Town and Country Planning Act, 1944. What followed deserves to be noted as an example of Government action from which much should be learned. As we have already recorded, the steps taken by the minister aroused the ire of the property owners, and a movement was quickly formed to oppose the scheme. The London press took an active interest in the opposition, too active an interest perhaps, and an attack was made upon the minister for his high-handed action. The minister attended a public meeting, when the chairman of the urban district council presided, and the minister was heckled. The district council then took a vote of the electors, when 1,316 voted against the scheme and 913 in its favour. There were 4,810 names on the register and just over

half the people voted. The voting paper contained three choices, and the voting for each was:

1. In favour of the scheme, 913.

2. In favour of the scheme, subject to a substantial reduction in the number of houses to be demolished and also to compensation being paid to all owners of land and property on the basis of the market value at the date of the acquisition by the ministry; and to comparable accommodation being given, with payment of removal expenses, to displaced persons, 282.

3. Entirely against the situation of a satellite town at Stevenage, 1,316.

The high number of votes against the scheme was not surprising because many people resented the manner in which the scheme was being imposed upon them. Indeed, at the local meeting the minister had been reported as saying that, whatever the opposition to it, the scheme would go on. There can be no doubt that too little care was taken for the human interests affected. People hate to be disturbed, and many people were fond of their homes in the town because it was small and they were secluded. Moreover, the basis of compensation for compulsory purchase was generally thought to be inequitable, and all who had had experience of the manner in which the Government (any Government) meets claims upon it knew that ungenerous treatment could be expected. Otherwise the result of the poll was not unsatisfactory. It showed a substantial minority in unqualified favour of the scheme. Had the inhabitants been approached with appreciation of their natural feelings, with the desire to persuade them that the elements of disturbance would be kept to a minimum, that compensation would be reasonable, and that the scheme was of importance in the national interest, accompanied by the invitation that they should take part in the making of the new community, a smaller number would probably have been against it. Of course, the fundamental trouble lay in the fact that it was intended to plant the new town upon an old though small one.

All these are matters to which serious attention should be given in the inception of schemes for new towns. Opposition there is bound to be, because it is in human nature to object to what affects one closely and over which one has little or no control. At Letchworth none of the very few original inhabitants except a few farm labourers looked upon the coming of the city with any pleasure. Had a vote been taken, it would have been wellnigh unanimous in rejecting the scheme. Yet such a result would have been wrong, and it would have been difficult to find a single person afterwards whose interests were damaged by what was done, though a few, of course, were disturbed, and the general benefit was unmistakable. At Welwyn Garden City the few original inhabitants with hardly an exception hated the idea of building the satellite town, and the neighbouring small town of Welwyn was solidly hostile, though not one of its comfortable residents was directly affected, and its tradesmen had every reason to be glad. To secure the active co-operation of the original inhabitants, so far as it can be got, should be regarded as a necessary element in the establishment of a new town, and to ensure the payment of generous compensation where it has to be paid should be regarded as a no less pressing obligation.

After the poll at Stevenage, the urban district council considered the situation, and passed the following resolution, which indicated the local state of mind:

That the council informs the Minister of Town and Country Planning of the result of the referendum; that while the council and ratepayers sympathize with the desires of the minister to alleviate the housing and living conditions of many people living in congested and inconvenient areas, it is considered that the difficulties incidental to the task of superimposing a new and larger town on an old one such as Stevenage are so great as to restrict and make almost impossible the realization of the aims and objects of the minister in this direction; that in view of the improved transport facilities which it is expected will become available in the near future, the council considers that the siting of any new town within a radius of thirty miles of London will in the course of a very few years create other dormitory towns and must defeat the present intention of the minister; that the council in view of the foregoing respectfully requests the minister to hold a public inquiry at the minister's expense so that the whole question which now affects the district of Stevenage shall be given the fullest consideration; that the council be given every facility to submit an amended and modified plan to the minister if, notwithstanding the reason already given, the minister decides, after a full, impartial, and further investigation, to proceed with the town-planning scheme.

The New Towns Act having then been passed the minister proceeded under that Act and made the necessary order, and a public inquiry was held in October 1946, when the organized objectors, who had formed the Stevenage Residents' Protection Association, had counsel to represent them and expert witnesses were called to give evidence against the scheme.

Among those represented at the inquiry, in addition to the residents' association, were the local branch of the National Farmers' Union, the urban district council, the local parish councils, and an independent group of residents. Both the Lee Conservancy Board and the Metropolitan Water Board objected to the scheme, and there were many private objectors. The objections included the allegations that a virgin site should have been selected, that the site was so close to Hitchin, Letchworth, and other towns that coalescence of the urban development of the entire area could not be prevented by town-planning powers, that the site was too near London to enable the new town to be a self-contained unit, that existing houses would be pulled down, that the disturbance to farming would have an ill effect upon food production, that a further 5,000 acres would later be taken to provide land for recreational purposes for the new town, and that neither an adequate water supply nor efficient sewage disposal could be provided. There were other objections based on the preliminary plan that had been published. Complaint was made at the inquiry that there was no opportunity for the cross-examination of expert witnesses giving evidence on behalf of the proposal, as there were no such witnesses. Some of the objections were reasonable, others were not, being merely natural reactions. Notwithstanding, in the following month the minister made the Stevenage New Town (Designation) Order, 1946, sending a letter explaining his action to the local authorities concerned.

Three local residents then appealed against the order to the High Court of Justice, alleging that the minister had not acted within his powers under the Act, because no case on behalf of the order had been put forward, and that the minister, exercising a quasi-judicial function, had failed to consider the objections fairly and properly, and, indeed,



had not an open mind. The case was heard in February 1947, when the judge dismissed the first ground of the appeal but accepted the second, and quashed the order, saying that 'the minister had not decided with an open mind whether or not to confirm his order, but had meant to confirm it whatever the force of the objections, trusting that some solution should be found.' This, of course, caused much jubilation among the objectors, though many inhabitants, in particular the working-class inhabitants, were glum, and expressed bitter disappointment.

Appeal was then made to the Court of Appeal by the minister, and the appeal was allowed, the court deciding that the minister had acted as prescribed by the Act, and that there was no evidence of bias. The objectors carried the matter to the House of Lords, where the appeal was heard and rejected in June 1947.

The minister's own defence of his action he had already given at a meeting held in November 1946, when, speaking on the proposals to build a satellite town at Hemel Hempstead, he had said:

It has been criticized that I should constitute myself as judge and jury and that no man ought to be judge in his own court. That is an entire misconception of the functions of the inquiries. Before ever the inquiry was held, I had to be satisfied, after consultation with any of the local authorities, that it is expedient in the national interest that the area should be developed as a new town.

That is a responsibility which I think ought to be placed upon a minister, but having satisfied myself, it would be quite wrong to submit the whole thing to the judgment of an outside person who has no responsibility at all and who may not have the knowledge or background or information to enable him to make a decision. If I find objections are sound, I am bound to take them into consideration and either drop the scheme or modify it.

However, the minister has only to consider any objections to be unsound to reject them. Answering a question in the House of Commons on the same date, the minister said that in future inquiries under the Act he would arrange that

... in addition to my inspector, whose duty it is to report the objections to me for my consideration, an officer of my department will attend to explain the proposed project and the reasons which have led to it. He will be there to explain the proposal, but not to be cross-examined.

The subject is one of general governmental administration and does not call for extended examination here. In the present writer's view what has happened at least points to the need for the New Towns Advisory Commission already referred to, to initiate and prepare schemes, so that the minister may discharge his proper functions under the Act. It cannot be satisfactory that he should be involved in the execution of schemes, and the initial steps are part of the work of execution.

The same kind of objections as at Stevenage were made in connection with the Hemel Hempstead and Crawley-Three Bridges schemes, and the objectors took their cases to court, without however meeting with any success. These legal difficulties held up progress; objections are to be expected, but a different handling of these projects ought to take place in the future, unless public dissatisfaction is to be created on a large scale.

After making the draft order the minister usually appoints an 'advisory committee' consisting of the persons he intends to appoint as members of the development corporation.

## § 15

After the confirmation of the draft order with any amendments, the minister establishes the development corporation to be responsible for the new town. The Act provides that the corporation should consist of a chairman, deputy chairman, and not more than seven other members. In making the appointments the minister is required to consult with such local authorities as appear to him to be concerned, and he must have regard to the desirability of appointing one or more persons resident in the locality or having special knowledge of it. The members of the development corporation are to be paid, and are to carry out their duties subject to any directions made by the minister. An annual report has to be made to the minister, who is required to lay it before Parliament. The powers and duties of the corporations as laid down in the Act are very wide, but they are required to act under the direction of the minister. Time will show if this direction goes too far. At present the indications are that instead of being allowed the freedom of a public utility corporation they are tied down by the Treasury in every major operation, including the engagement of their staffs. Unless the governors are allowed to act in accordance with their own initiative and enterprise, the new towns can hardly be expected to be made a success, and men of first-class capacity will not continue to serve upon their boards. We shall return to the matter as it is of major importance; but it may be admitted at this point that no doubt it was necessary that in the initial stages the minister should have powers of control so that he might quickly correct any tendency towards serious mistakes. On the other hand, centralization of control could easily be carried too far, and, even at the cost of mistakes, the development corporations should be allowed to develop their own individualities and be given the opportunity to make the fullest contributions of which they are capable to the towns for which they are responsible, and thus to the national life.

## § 16

The direction and management of the development corporations is of the first importance; for unless placed on a sufficiently high level the results cannot be anything but indifferent. There should first be recognized the difference between the functions of direction and management. On this subject much is to be learned from the early experience of the Tennessee Valley Authority in the United States of America, whose operations are nearer to what the corporations will have to do than anything hitherto carried out in this country. When that body was first established the three members of the board took upon themselves the executive control of various parts of the work, with the result that conflicts arose between them of which there was no means of reconciliation. Not until the board confined itself to direction and the formulation of policy, leaving the execution of the work to the technical officers, was the conduct of that vast enterprise put upon a satisfactory basis.

The governors of the new development corporations should exercise the functions of direction, being responsible for the organization as a whole, and should not themselves engage in administrative or executive work. The chairman ought to give his full time to the work of the corporation, and the governors full or part time: the amount of time makes a difference. The present writer is of the opinion that a call upon the full time of all the governors should be made, and that at least the major portion of any governor's time should be devoted to the work. The governors will have the responsibility for the scheme and they should feel the responsibility. A directing board of any enterprise ought ideally to be composed of those who have had experience of the undertaking, or of a similar undertaking, in an executive, technical, or operative capacity, but there will be few such experienced people available for the new towns, for the only experience is that gained at one of the garden cities. Of course, people with knowledge of land, building, engineering, architecture, local government, and other cognate matters are to be found, and such knowledge is better than nothing; practical knowledge of some kind ought certainly to be possessed. In its absence, and, indeed, with it, men are required as governors who have comprehension of the complexity and nature of the undertaking for which they are responsible. Technical knowledge in directing such an enterprise as building a new town must, however, be subordinate to minds of humanistic outlook, to imagination, and above all, to a sense of community. It is right that at least some of the governors should live on the site; but they will need much prudence to enable them to take part in the life of the town and yet not to have their true functions interfered with.

### § 17

In the Reith committee's report the executive organization is given some attention; its recommendations are that there should be a director-general, who should not be a member of the governing body, but should act as the chief executive officer, having under him five other officers, who should be of equal status, and should work as a team, a business manager, a chief architect, a chief engineer, an estate officer, and a public relations officer. The present writer is of the opinion that this is not sufficient to cover the main functional and structural activities for which provision has to be made. Men of equal status are required to take charge of housing, industrial facilities, commercial facilities, agriculture, and community organization.

Each development corporation will be responsible for its own organization, subject to direction. In the notes at the end of this book are some of the advertisements published by the ministry inviting applications for the first executive positions in the corporations, which gives an indication of intentions. An earlier indication had already been given of how the ministry regarded the staffing of the corporations in the paper given by its late chief research officer already mentioned. From this document it appeared to be intended that a development corporation should have a chief executive officer to have charge of the organization as a whole, which should consist of three main branches:



(1) administrative and financial, (2) technical, and (3) constructional. According to the scheme expounded these branches were to include:

(1) Administrative and financial: (i) finance, (ii) legal, (iii) personnel, (iv) accommodation, (v) contracts, (vi) social welfare, (vii) estate management, and (viii) information.

(2) Technical: (i) town-planning, (ii) architecture, (iii) landscape architecture, and (iv) civil, mechanical, and structural engineering.

(3) Constructional: (i) labour and labour welfare, (ii) materials, (iii) transport, (iv) machinery, and (v) maintenance.

This organization had apparently been designed on the recognized form of a Government department. It covered the proposed work in an abstract rather than a practical way; that is to say it was intended to facilitate the information necessitated by centralized control. The approach of the Reith committee appeared to be more concrete. Without, however, going into the matter in too close detail, and certainly without a desire to criticize the scheme of management in any controversial spirit, the question ought to be raised of the possibility of looking at the organization with the single object of reaching the end for which the development corporation is called into existence, with a minimum of direction from the minister, and with as few questions as possible to be referred to the Treasury. The development corporation exists to create a new community, which is essentially a form of co-operative association on political, economic, and cultural levels. The new town is a society, with various parts, and requiring numerous organs through which the interaction of its members may be expressed and become productive. Therefore the organization required to bring the town into existence should be modelled on the form of the various functions that the town is to fulfil. The members of the organization ought to be regarded as a leadership in whom the aims of the undertaking are contained and through the initiative of whom the town comes into being. They consist of administrative and technical workers of many kinds; they have, however, a common object, to be achieved only in combined action. At first the organization exists by itself, but very quickly the people who arrive to populate the town and to work there become factors with it. The larger part of the population will of necessity be transplanted. They will be selected by the local authorities under whose auspices or on whose initiative much of the housing will be carried out. At the two garden cities the population was not selected in any manner. Anybody came who chose, and each had his own personal reasons for coming: some came because their work was moved there and nearly all the working people came because of work; others came because the idea of the town appealed to them, or perhaps merely because they wanted a house and found one to suit them; and there were of course those engaged in building the town and the professional men who were seeking a field of practice. The town-building organization must therefore possess elasticity and powers of adaption and absorption, so that it may incorporate within its scheme of operations such elements from the new population as are available. Furthermore, the organization has to work with local authorities and other bodies on which it may depend in one way or another.

The principle of organization should be that the heads, or leaders, of the various branches of its work should act together in all that they do. It is not without significance that the first part of the organization to be mentioned in the above official lay-out was finance. Finance means control in a special and final sense, and control of a wholly abstract nature: it means in this connection Treasury control. Nothing could be more fatal to the undertaking as a living organism brought into being for a creative work than for finance as ordinarily understood to have such control. Its place ought to be subordinate and instrumental.

The chief executive officer as the co-ordinator and head of the work should see that co-operation takes place in every administrative and technical activity, and that leadership in association is secured on every level. He should not be merely the channel of communication between the governors and the departments, acting simply as the representative executive head. All this he must be too; but in a different sense from what usually is found even in highly organized industrial undertakings where work is often done in watertight compartments, and, apart from more or less casual contacts and service on inter-departmental committees (usually regarded as a bore), or perhaps on the board itself, there is a minimum of association. Administrative, technical, and constructional activities should be carried out in such a way as to enable every one to share and every one to know everything.

### § 18

The functions that the organization has to carry out are as follows: (1) architectural; (2) engineering; (3) surveying; (4) public services; (5) transport; (6) building and construction; (7) housing; (8) industrial; (9) commercial; (10) agricultural; (11) community organization; (12) financial; (13) administrative and legal; (14) personnel and welfare; (15) publicity. Men of the highest calibre are required both to head and to staff the undertaking in all departments. Though the greater part, if not the whole, of the work of creating a new town will be completed within a limited time, from ten to twenty years, after which the development corporation will be dissolved, the work ought to be regarded as continuous, because towns require alteration and rebuilding to suit changing needs. They are never finished once for all, unless, of course, they are to die. Furthermore, new towns should follow each other for generations to come. Men should, therefore, not be engaged for the first series of new towns on a temporary basis, but with the object of their moving from one new town to another. Of course, some staff will be required to remain permanently to carry on the town and its maintenance, but others will find their immediate work coming to an end. This is another indication of the need for a national organization for new towns. The level of pay should be high, and it is essential that civil service rigidity should not be allowed to dominate the undertaking.

The first task of the development corporation will be to provide accommodation for its staff and workers. Some temporary arrangements will no doubt be required, but as

early as possible houses should be provided so that the administrators and executives can live upon the spot. The chief executive officer and all the heads of departments should live in the town from the start, and their own lives should become part of the life of the town. This is no doubt in some ways an onerous duty; but it should be regarded as a necessary part of their jobs. The task of building a town is of a different nature from a merely technical or commercial operation, because the builders themselves are part of the town and necessarily enter into its life. To keep the development corporation and its staff separate from the town would possibly simplify the administration of the undertaking, but at the cost of its essential character. There should be no disguising the fact that the work of all who take part in the enterprise makes such demands that undue concentration upon separate personal interests are not compatible with the proper discharge of their duties.

### § 19

Without making this chapter too lengthy and without trespassing upon the subjects dealt with in succeeding chapters, or pretending in the least to exhaust the subject, the following observations are made upon certain of the functions referred to above.

The question of land use and management is the first that arises. Under the Act, land can be sold by a development corporation, but it is not intended that land sales should be made except for public purposes; leases cannot be granted for more than ninety-nine years. The Act makes provision for those who are living or carrying on business on the site at the time of its acquisition:

The powers of a development corporation with respect to the disposal of land acquired by them under this Act shall be so exercised as to secure, so far as practicable, that persons who were living or carrying on business or other activities on land so acquired shall, if they desire to obtain accommodation on land belonging to the corporation, and are willing to comply with any requirements of the corporation as to its development and use, have an opportunity to obtain thereon accommodation suitable to their reasonable requirements on terms settled with due regard to the price at which any such land has been acquired from them.

This gives an indication of the desire of the legislature that the fullest possible consideration should be given to the interests of those affected by the scheme, and it is to be hoped that development corporations will be permitted to make a liberal application of these provisions. Under the Act, the development corporation can lease land for any purpose (subject, of course, to the direction of the minister), so that private individuals could lease land for houses for themselves, builders could take land for building purposes, shopkeepers could take land for shops, industrialists could take land for factory building, farmers could take land for agriculture, and land could be disposed of for churches, halls, or any other purpose. The restriction of leases to ninety-nine years was made on the recommendation of the Reith committee, but why leases should be so restricted is not clear. In the first thirty years there is hardly any difference to a lessee whether his lease is for 99 or 999 years, but after that period the term makes an increasing difference. This ought to be considered in connection with the proposal made here for a



use-life being placed on all buildings at the time of their erection; further discussion on this aspect of the matter is postponed to the next chapter. The development corporation may decide, of course, to do all building itself, and may even be directed to do so by the minister: at the time of writing no definite statement of policy on this matter has been made; apparently it is left for each corporation to decide for itself.

## § 20

The Reith committee recommended that:

The agency should retain the ownership of shops and other commercial premises and of a proportion of factories, for letting at rack-rents. . . . The letting of shops when the town is well established is one of the most profitable businesses which the agency can undertake, and one on which it must rely to meet its financial obligations in full.

In certain aspects the proposal as stated in the above words falls to be considered when the question of finance is dealt with. Here the point is made that shops and commercial buildings should certainly be owned by the development corporation, and long leases should not normally be granted. For this recommendation the Reith committee and the Government are indebted to Welwyn Garden City; were no other lesson learned from that scheme its pioneering work in showing how land used for shopping and commercial purposes should be handled puts the nation in its debt.

How shops and commercial buildings should be provided needs careful consideration. Over-building of such premises would be even more disastrous than under-building, for the latter would cause inconvenience while the former might create permanent loss. The subject deserves the closest attention of the development corporations and calls for expert handling. Shops play a large part in community life, and it is not easy to get good facilities in the early stages of a town's growth; for shops are not merely buildings, they consist of staff, management, stocks, expert skill in particular trades, and much organizing ability, and good shopping service grows slowly: there is no organization in existence capable of meeting the need. An exception might be made of the co-operative movement; but it can hardly be said that that movement, though theoretically fully equipped, is capable in its present stage of handling the problem in the manner required for a successful solution. It is not to be expected that the development corporations will follow the example of Welwyn Garden City and undertake retail distribution themselves through a subsidiary concern. They have the powers to do so, but the responsibility so assumed would be very great. As the development of new towns is certain to be more rapid than that of the experimental garden cities, the aim should be to provide shops to meet public needs without too great a time-lag. The development corporations will have to decide whether to encourage the leasing of shops to chain stores or to individual traders. The co-operative movement will undoubtedly play a large and important part, and developments are to be looked for in this direction. The subject is a complex one, of great social and economic interest, and each corporation should have a department to specialize in it.

## § 21

As the new towns have among their primary purposes to provide accommodation for the decentralized population from the great cities, the provision of housing has to be given early consideration. Most if not all of the new towns will be founded to carry out this task, and what is involved in it will affect all that they attempt to do. The first steps are the negotiations with the local authorities concerned, the number of people to be provided for, what dwellings are required, and how the schemes are to be planned and carried out. Building could be done in various ways: the development corporation could itself prepare and carry out schemes, schemes could be prepared and carried out by the local authority in whose area the new town is placed, or the local authority whose population has to be provided for could do it. Thus the development authority could accept the whole responsibility for a particular housing project, or it could lease or sell land to a local authority, which would develop it as a housing estate. There can be little doubt that the local housing authority will not wish to accept responsibility for decentralized populations, so that unless the development corporation directly undertakes the work the 'decanting' local authority will have to do it. The latter course appears the one that is to be adopted. Although the co-operation and active interest of a London borough could thus be of the greatest value to a new town, the fact is not to be lost sight of that the new town is to be a community, and that its housing development ought to be integrated and made coherent. Housing will be planned in the form of neighbourhood units, and the units should each be made a whole and brought into the larger whole of the new town. A new town will not be created by separating off portions of London and transferring it to a new site, even though the portions are called neighbourhood units. A new town is a new community. It seems to the present writer that the development corporation should itself build and manage a large proportion of the houses for the sake of the integration of the community.

It will be seen, therefore, that the subject bristles with difficulties, but is highly interesting from a sociological point of view, and also in its effect upon the future of local government. Local authorities have experience of joint action, and to extend that experience would be a social gain. There are questions that arise of a financial kind, the most pressing of which is how the rate contribution provided under the Housing (Financial and Miscellaneous Provisions) Act, 1946, is to be provided. At present (1948) the standard amount of subsidy from the Treasury is £16 per dwelling for sixty years, with £5 10s. from the local authority for the same period. The development corporation will be entitled to the Exchequer contribution; but who will pay the rate contribution? Obviously it could not be met out of the rates of the new town; in equity it should be paid by the authorities for whom or by whom the dwellings are provided. The present intention is that where local authorities carry out their own schemes in the new towns they will require to provide the rate subsidy, which means that those who are left behind will have to contribute towards those who have been fortunate enough to

migrate. Whether the local authorities pay out of their rates on the standard amount, or on one of the lower scales, the Treasury making up the difference, is a matter between them and the Treasury. It must be obvious, however, that housing in the new towns should not be at a financial disadvantage compared with housing elsewhere.

Although it will be out of the question for some time to come, the development corporation should aim at having a certain proportion of empty houses. Populations are not static, for households grow and decline, and there should be provision for the movement of population, so that no family should need to have a dwelling that is too large or too small. Of course, what is too large or too small people should decide for themselves; there should be no compulsion, except that minimum standards to prevent overcrowding should be observed. Exchange of houses should be one of the functions of the housing management of the town. Housing management should be treated as an important function, for it will be concerned with the greater number of the town's houses. It should be looked upon as more than a mere rent-collecting function, as it should cover the use, fitness, maintenance, and improvement of the houses of the town.

Balanced housing development of the town should be regarded as necessary from the start. Every effort should be made to prevent the characteristically heavy atmosphere of the housing estate. From the very beginning the development corporation should build middle-class houses, or see that they are built, and the marked differences between 'working class' and 'middle class' should be avoided. In ordinary towns, even in Letchworth and Welwyn Garden City, there is no mistaking certain streets as containing housing schemes, and others as the products of middle-class or private enterprise building, and it cannot be said that the problem was wholly solved at the garden cities, but some attempt was made to handle it, and with more adequate resources more would have been done. Large housing schemes, however, have a monotony of aspect that is rightly objected to, and the large schemes that will be required in the new towns ought to avoid it. The cause of this monotony is the maintenance of class distinctions that should be regarded as outdated and the new towns should not perpetuate them. We see already that the future income levels of workers, whether operative, clerical, technical, or administrative, are certain to be much nearer each other than they have been, and the houses of the future, even the smallest houses, should not deliberately reflect class consciousness. This does not mean that the wholesale planning and design hitherto adopted in housing estates should be applied to all house building. On the contrary, it is a suggestion that individuality and elements of personal feeling and skill should become general. In this connection, the use of housing associations for building groups of houses should be facilitated. This is a matter that calls for the true expression of the art of architecture devoted to the task of community building, and freedom must be got from the skimping meanness that has been imposed upon municipal housing at all times, preventing architects and builders alike from doing their best work. It is in this direction that the new towns could make a contribution to the national life that would carry the most distinction.



## § 22

The development corporation will be faced with the necessity of deciding whether to build or to employ contractors. In view of the fact that a continuous programme of building, of road construction, of the laying of sewers and water mains, and the planting of roads and open spaces, will have to be carried out, the development corporation will find it possible to set up its own building, public works, and horticultural organizations. The Reith committee, dealing with this subject, thought 'that it would prove a heavy additional burden on the management, especially in present conditions,' for the corporation to do so, and its recommendation was as follows:

We therefore consider that the major constructional work should be carried out by contract, normally by competitive tendering. The main heavy civil engineering or public works will have to be on long-term contracts, and there are definite advantages in employing a single contractor for the whole area, or more than one if it is possible to divide up the area conveniently or there are major works which can be carried out separately. This will relieve the corporation's chief engineer from having to supervise the sequence of operations of the innumerable different jobs, many of which will have to be carried out by sub-contractors, which the main contractor will arrange, subject to general approval by the corporation. This will also secure the maximum continuity of organization and enable the arrangements for labour, accommodation, supplies, etc., to be carried out on a permanent basis. At the same time it will prevent the overlapping and conflicting demands for labour that cause such confusion when a number of independent contractors are working on the same site.

This was not a very satisfactory recommendation, for it was inconsistent and by no means clearly expressed. There is, in the present writer's opinion, no real alternative to the development corporation undertaking responsibility for the work and setting up its own organization. The state of the building industry is such that new methods of organization are urgently necessary, and a development corporation is in a favourable position to make a contribution in this direction.

At Letchworth the work of development was at first done by contractors, but the company had to set up a works department to do maintenance and later to carry out constructional work. At Welwyn Garden City, a public works and building contractor was employed in the early stages, but after the first year the company formed a building and public works subsidiary, and from that time all its work was carried out by that body. To-day part of the strength of the Welwyn company's organization lies in the existence of this enterprise, and the experience it has gained to enable it to carry out constructional work on the largest scale as well as to look after all maintenance is invaluable. There is a definite advantage enjoyed at Welwyn by having the building company as part of the development company's own organization. The same advantage would not be enjoyed were even a single contractor employed, because there would not be the same intimacy of contact, nor the common interest, which is, in fact, the primary and substantial advantage of the system. There can be no difference under any method in the amount of supervision required from the developing authority's own technical staff; for, despite what the Reith committee says, sub-contractors have to be supervised

no less than a main contractor; but when the constructional arm is part of the whole organization, supervision can be transformed into co-operation, and a different spirit comes into action.

Constructional work includes tree planting and horticultural work, including the maintenance of grass and open spaces, and a nursery and horticultural staff are required for that purpose.

### § 23

Where the new towns are to be, what size they are to be, and how their development is to be organized are the primary questions in the execution of the policy to which the nation is committed. To these questions some attention has been given in this chapter, in which the experience of Letchworth and Welwyn Garden City has been sought to be applied. At every stage of the work, the public should be informed, especially the public that comes to live in the town. For this purpose the Reith committee proposed that a 'public relations officer' should be employed, and the official scheme of organization includes an 'information' department. There can be no doubt that the Reith committee is right in putting the man responsible for information on the same level as the other officers. Information should not be given an inferior or subordinate status, for it is a vital element in the creation of the town. What is required is to make the town known to the public at large, to provide a bureau of information for inquirers, to receive and assist visitors, and to inform new residents of the progress of the scheme and of its stages of development; in short, to be a means of interpreting the scheme to the public and of interpreting the public to the management and direction of the enterprise. It is a two-way function and to discharge it an efficient staff is required with adequate accommodation.

In this connection, the press ought to play an important part. There will be local newspapers usually more than one serving the district, and other neighbouring papers ready to serve it, and they should be kept fully informed. The Reith committee's recommendation on this matter was as follows:

It is most desirable that there should be a weekly newspaper—existing or new—which would encourage the formation and record the doings of all the essential social, cultural, and recreational activities; which would help to foster the growth of community pride and community spirit, mutual interest and service; and which would report adequately the progress of development and the purposes and plans of the agency, and provide a forum for discussion and criticism of local interest and concern.

The agency should therefore approach any papers already circulating in the area and ascertain from them whether they would be prepared to act on these lines, or, alternatively, to start a new weekly newspaper specially for the new town. If capital were a difficulty in the latter event, the agency might itself provide some of it, but not so much as would enable it to exercise control. It would also be important that the paper should choose as its local representative someone who would do justice both to the agency's aims and policies and to the opinions of residents and other interested parties.

That the development corporation should itself support, or subsidize, or find capital for a newspaper for the town is not desirable. It is true that many local newspapers are not

conducted on a high level of efficiency, being unenterprising, tied to conservative methods, often poorly staffed, and not always well printed. There is a tradition of 'the fine independent provincial newspapers' which applies to the morning papers of the cities, not so seriously to the evening papers or the weekly press. In the rural areas, where the new satellite towns will usually be placed, the weekly papers may be staid and old-fashioned, occasionally they may emulate the worst crudities of the national press. All the same, an official newspaper or a paper officially controlled could not 'provide a forum for discussion and criticism of the agency's policy and of all other matters of local interest and concern.' The experience of Welwyn Garden City is emphatic on that point, and though the present writer was responsible in the first instance for what was done there, he has to agree that the developments which followed have not been satisfactory. The press as a means of communication between the inhabitants, and as an expression of the thoughts and feelings of the people, must be free, or it is worse than useless. The local press must be got to rise to its opportunities; if it does not there will be a call for new organs to be started, but not by or on behalf of the development corporation.

The development corporation, however, should be active in fostering the social and community life of the new town. That is a different matter. An officer of the corporation should have it as his duty to see that the welfare of the inhabitants in the best sense of an abused word is cared for. Of course, this is something in which all who are responsible for developing the town will share; but so, indeed, will they share in every part of the work of construction. For, as the Reith committee said, the work has to be that of a team.

## § 24

We shall now consider certain more technical aspects of the development of the new towns. There is no pretence that the subjects dealt with in this chapter have been exhausted, for they are no more than touched upon and what is said needs to be followed up. In particular on the selection of sites further study may show that in some areas, including Greater London, the 'natural' sites for new towns are already occupied. This should not as a rule lead to the extension of development on those sites, but to a wider and rather different survey than has yet been attempted, bearing in mind that for such artificial things as towns sites should be created. We have not been able to pursue that subject within the limits of this book.



## CHAPTER III

### THEIR PLANNING

It is that of yet more comprehensive studies; not only of countries and of towns separately . . . nor even of their past in relation to their present, and conversely: it is the study of town in country, and of country in town, and these through past and present alike. It is the appeal of regional unities, yet also of these as regional diversities. . . . It is time then to be ending the ancient feud, the artificial separation of town and country. . . .

PATRICK GEDDES, *Cities in Evolution* (1914)

#### § 1

THE entire basis of a town-plan is first geography, the area and disposition of the land, second the kind of town, the functions it has to fulfil, third the economic factor, which is the interdependence of its industry and the interchangeability of its labour, and fourth its relations to the surrounding countryside. The town-plan is the design of the town, the abstraction of its structure, and its preparation is a function of the development corporation set up by the minister. In preparing the plan, the corporation is required to observe any directions made to it by the minister, and to submit the plan for his approval. Then the minister is required to consult with the local planning authority and any other local authority that appears to him to be concerned. Thus, while the development corporation is subject to conditions, the town-plan is none the less its fundamental act, and the preparation and execution of the plan are its most important work. Undoubtedly the plan should be prepared by the corporation through its own architectural and technical staff; the employment of consultants for this work, which has been the practice hitherto, should not be continued, neither should the plan be prepared by the ministry. Whatever degree of initiative and enterprise is possessed by the corporation must necessarily start with and be maintained in the plan.

#### § 2

A detailed survey and the preparation of a contour map are required as the first steps. This survey should detail all the physical features of the site, the buildings, trees, roads, railways, public services, and everything of interest; the contour plan should be the levels at five-foot intervals; the subsoil should be tested by boreholes. Use should certainly be made of aerial photography, which can reveal more than the unaided eye can see. The Reith committee suggested that contour models of the site would be an advantage, which is true.

On the basis of the survey the plan of the town can be prepared. The preliminary plan prepared prior to the designation of the site may be consulted, but it ought not to control in any rigid sense the plan prepared by the corporation, whose architect and those working with him should have a free hand within the limits of the site and the size and character of town the corporation has been instructed to create. Under the new

Town and Country Planning Act, the county council is the planning authority; but the development corporation will not be brought under that Act, as if it were a local authority, but will be responsible for its own land. The plan will, however, have to be approved by the county council, and the development corporation will, of course, consult the county council at every stage of its preparation. That the county council should play a part in the creation of the new town at this early stage is a good thing.

## § 3

The elements of the plan are the functional parts of the town, and their relation to each other is what constitutes the plan. In the paper on new towns by the late chief research officer of the Ministry of Town and Country Planning to which reference has been made, the following allocations for the various areas for a population of 60,000 were suggested:

	<i>Acres</i>
Residential, including local open spaces . . . . .	2,000
Industrial . . . . .	600
Main centre . . . . .	100
Neighbourhood business areas . . . . .	60-80
Schools and playing fields . . . . .	300
Major parks and open spaces . . . . .	1,000
Rural belt for farms, golf, market gardens, hospitals . . . . .	1,500
Railway land . . . . .	100-200
Total	5,780
	(say 6,000 acres)

These areas may be compared, so far as the figures are comparable and available, with areas allocated at Letchworth and Welwyn Garden City, each for a population of 35,000:

LETCHWORTH		<i>Acres</i>
Residential . . . . .		1,399
Industrial . . . . .		262
Civic and commercial . . . . .		57
Highways . . . . .		158
Playing fields and open spaces . . . . .		306
Rural belt . . . . .		2,380
Total		4,562
WELWYN GARDEN CITY		<i>Acres</i>
Residential . . . . .		822
Industrial . . . . .		413
Civic and commercial . . . . .		84
Schools (including playing fields, etc.) . . . . .		168
Highways . . . . .		222
Railway company . . . . .		131
Land owned by other freeholders . . . . .		39
Major open spaces . . . . .		658
Total		2,597

The three sets of figures are not altogether comparable as the basis of each differs too widely. The Letchworth figure includes only land belonging to the garden city company, it thus excludes railway land and land sold to the county council for schools. The Welwyn Garden City figures include only the land within the urban district; the area allocated for industry is intended to serve a larger population than 35,000, and it will be observed that the term rural belt is not used, but 'major open spaces' instead, because the rural belt was mainly to come out of the additional land belonging to the company, the total area of its estate being 4,536 acres.

#### § 4

The idea of the neighbourhood unit, in its present form, which is to be adopted in the new towns, has been borrowed from studies in the United States of America made between the two wars. It was, before that, an integral part of Ebenezer Howard's conception of a garden city in 1898; for each of the wards in his original scheme was a unit of 5,000 people, with its own community buildings. Neither of the two garden cities was carried out on this plan, however, though its influence is marked upon the Letchworth plan. In fact, the garden cities show the need for neighbourhood units, a fact that has been disguised because their growth has been relatively slow. In their new developments this fact is recognized, as will be seen from the plans. The first discussion of the subject in this country was made by a survey group of the National Council of Social Service and published in *The Size and Social Structure of a Town* (Allen & Unwin, 1943). The recommendations of this group were based upon experience of the defects of housing estates, the segregation of rigidly defined income groups into separate residential districts, the inadequacy of social institutions, the frequent absence of sites for churches, community buildings, etc., and so on, and the recommendations were that neighbourhood units, with a maximum of 2,000 dwellings and providing for a population of from 7,000 to 6,000 persons 'and finished with the communal facilities required for the full development of the life of the neighbourhood,' should be built. The communal facilities were described as follows:

- (a) Sites for places of worship.
- (b) Nurseries and primary schools, and a branch of the public library with a room for exhibitions.
- (c) Child welfare and other clinics directed to the positive promotion of health.
- (d) Playing fields and other open spaces, including a public garden with the minimum of railings or hedges and the maximum of informality; and in addition a communal wash-house and, when possible, a municipal laundry service and a swimming bath.
- (e) Shops, a market, restaurants (communal or private), and a cinema.
- (f) A community centre, including an all-purpose hall with a good stage.

And the following recommendations were made:

It is desirable that the building of a community centre, so designed and constructed that it can be largely managed by the community association of the neighbourhood, should proceed simultaneously with the building of houses, and that the centre, or the essential nucleus of a centre, should be available to the residents from the beginning of their residence.



In the initial planning of a neighbourhood unit, space should be set aside for the provision of communal facilities, and (when expenditure has to be borne by the local authorities and/or semi-public corporations concerned) the allocation of funds should be considered at the same time.

The subject was further discussed in the report of a study group of the Ministry of Town and Country Planning printed in *Design of Dwellings* (H.M. Stationery Office, 1944). The writers of the report were concerned with the reconstruction of existing towns and cities, whose neighbourhoods 'are now largely obsolete not only in the sense that their buildings are outworn, but also in their physical arrangement and use'; they also dealt with new housing areas. The allocation of land for neighbourhood units in what they called 'open development,' which included new towns, was as follows:

	<i>Acres</i>
Housing . . . . .	333
Primary schools (3-11 years of age—school and playing field area) . . . . .	17
Open space . . . . .	70
Shops, offices, etc. . . . .	9
Community centre, churches, etc. . . . .	7
Public buildings . . . . .	4
Service industry and workshops . . . . .	7
Main roads, including half boundary roads, up to a maximum of 20 ft., and parking . . . . .	35
Total	482

While the above information is given as an indication of study, it need not be assumed that the present writer accepts the statements or figures quoted as beyond criticism. They require to be looked at in relation to the rapidly changing conditions of modern life.

## § 5

The architect of each new town with his staff should be in control of the plan and of the design for the town as a whole, and be required to approve all buildings. There should be no necessity to employ outside consulting architects for any of this work; indeed, the less advisory people are brought in for technical or any other purpose the better, because it means division of responsibility, and the appointment of an adviser is too often a way of shirking one's own responsibility. The architectural staff of the development corporation should have sufficient standing, with the backing of the corporation, and acting in association with the other technical departments, to maintain standards that are defined and understood, but not rigid or lifeless. To make a town is a creative act, and creativity of a high order is to be expected in its architecture, for what is architecture unless it is building for the social purposes of a community? The development corporations will be judged more upon the selection of their architects and their staffs, on the demands they make of them, and on the support they give them, than on any other single factor. For the architect as town-planner has the central place in making the plan, although the conception of the social structure, of which the plan is

an abstraction, should not be his alone, for to the content and development of that conception every officer of the corporation and the corporation as a whole ought to contribute. Yet it is the function of the architect-planner to give imaginative and technical interpretation to the fundamental constructive ideas.

## § 6

The allocation of 2,000 acres for neighbourhood units for 60,000 people means that something under 340 acres was intended to be allowed for each unit of 10,000 people, which is an average density of 29.4 persons for each residential acre. This includes roads and small open spaces, and is just over eight dwellings to the acre on the basis of 3.5 persons per dwelling. Thus, compact development is envisaged. The neighbourhood units will not, however, be mere housing estates, for it is intended that houses should be built for all incomes; and the minister has declared that he has 'not the slightest objection to individuals building their houses under lease' (at a luncheon of the Association of London Property Owners, 1st May 1946), which means that there can be industrial building and the employment of architects chosen by people themselves.

These neighbourhood units, designed as a whole, related to each other and to the town as a whole, will provide unprecedented opportunities for new ideas in design and structural methods. The architects should work out the right size of dwellings, the number and size of rooms, and the areas required. Though there has been research in this field, there is still much to be done to produce satisfactory dwellings, and, in fact, the results of research, such as they are, are not utilized. The number of dwellings of different sizes required for a community is another subject not yet investigated. It should not be ignored in the new towns. There is too much guesswork at present, and too much use of mere averages in housing; but there are no average people, as we should know. Among other things, much larger houses will be needed in future to enable the family to function, and to give children a room of their own at as early an age as they need it. Furthermore, houses should be built to take account of the English weather, not designed for a climate that is rarely enjoyed in this country for any length of time, which is the complaint against nearly all houses new and old in every existing town. They should be made structurally warm for the severest English winters, and with sufficient window space to take advantage of the light and warmth of the spring and summer. The fact that severe frosts are experienced should be remembered so that water tanks and pipes are protected. There should be central heating and hot water supplies to all houses from a central source, conserving fuel. The Reilly plan for grouping houses around greens and providing central cooking arrangements ought to be considered and tried out in various forms.

There is no need to discuss in detail the planning of the houses and the accommodation they should provide, for of all matters in connection with town building this has been most fully discussed. Each of the towns should have a character of its own, as Letchworth and Welwyn Garden City have each their own unmistakable characters. The

Letchworth house, though repeated on a large scale and with every kind of modification throughout the country, and although held in some disrepute even in Letchworth itself, is still, characteristically, the country cottage as conceived nearly fifty years ago by Parker & Unwin. It was detached or semi-detached and not essentially different from the country villa of the speculative builder. It was not a kind of building that contributed to a good street effect. At Welwyn Garden City, on the other hand, an attempt was made to create a street effect by semi-Georgian design. The houses were not country cottages but town houses. De Soissons's influence in this direction was considerable and his success undoubted, as much modern building elsewhere shows. People complained that the Welwyn houses were too much alike in appearance, but that was because they were different from what they expected; they discovered that the likeness was not a tiresome uniformity. The original standard of street design has not, however, been maintained at Welwyn Garden City, and there has been little architectural development of interest there except in some of the last pre-war housing schemes, and in the projects for post-war developments. All the same, it is true that the garden cities have played their part in expressing the idea of function in architecture, for they were themselves the expression of function. In its direct architectural contribution, Letchworth did not go beyond experimentation in cottage planning and construction, but its indirect contribution was considerable, and both there and at Welwyn there were demonstrated the functional elements of town-planning and the essential nature of town design.

In the new towns this should be carried further. The initial basis of the town's structure is not the town's centre, but the homes of the people and the neighbourhood units. Because the new towns will be built on a scale enabling neighbourhood units to be built as a whole, one unit following another, the architectural and planning results should be noteworthy. It is certainly to this aspect of their development that the most constructive critical attention should be directed. What may be called the scientific basis of the housing architecture of the new towns, that is to say their basis in thought, should be found in the towns as a whole. There should be a discernible relation between the town-plan, the plan of the neighbourhood unit, and the house-plan.

The fact that a higher standard of life than that to which working people have been accustomed in the past will exist in the future should be recognized, and there should be no sub-standard houses. Each new town should have its own housing standard, and local authorities and others that build there should be required to conform to it. This may mean that local authorities may have to build to a higher standard for their dispersed populations than they have been ready to adopt in their own areas, which will no doubt arouse conflict, but it must be faced. Garages for private cars will be required for most houses; these should be provided either as part of the dwelling or in groups of garages. Small vans, however, used by people in their business, should be garaged at a workshop or industrial centre, not among houses.



## § 7

Most houses will have gardens, and experience at Letchworth and Welwyn Garden City shows that gardens are usually well cultivated. The ordinary townsman in England is almost invariably a countryman at heart, and loves the soil. There are some people, however, who have no liking for gardening, having lost all idea of country life and the meaning of nature, and such people should not have gardens forced upon them. A proportion of people, perhaps one in ten, will want an allotment in addition to a garden; the greatest trouble of allotment holders is that their holdings are usually on a precarious tenure, and this should be remedied in the new towns. The plan should provide for small areas of suitable land to be set aside permanently for this purpose, with tool sheds, water supply, and proper road access.

## § 8

In each neighbourhood unit the shops, workshops, churches, schools, and public buildings will cover a total area of, say, forty-five acres, together with small open spaces of not less than thirty acres. This area of seventy-five acres is in addition to the area to be allowed for residences. The main shopping area will be discussed later; but a number of shops and offices will be required for local needs. Investigation into the number of shops required by any population is still in elementary stages. On the whole, shopping service is so inefficient that attempts to base requirements upon what exists would be to arrive at inconclusive results. A Retailers' Advisory Committee on town-planning formed by the Ministry of Town and Country Planning prepared a report (1944) containing a number of useful suggestions on the lay-out of shopping areas, also upon the number of shops required, but its results were not convincing on the latter question because the numbers were averaged. In the new towns, the fact that there will be a well-planned central shopping area easily accessible to the whole town will reduce the need for many shops in the neighbourhood units. There should be a general store, and in addition not more than three or four each of grocers, butchers, and greengrocers, and, say, twenty other shops in each unit, not more. In this, as in other matters, the new towns will have to experiment. Each neighbourhood should have a number of small workshops adjoining its shopping area for local craftsmen and other workers. Craftsmen should be allowed to sell their own products on the premises, but care should be taken to prevent workshops being converted into shops. Garages and motor repair workshops will be required, and lock-up garages.

## § 9

The public buildings include churches, which will be provided on a voluntary basis. The Reith committee discusses churches at some length, and makes the useful suggestion that there should be a council or conference of all churches and religious organizations

with which the development corporation could co-operate. There should, indeed, be an organization of the kind to consider church sites in all the new towns as a subject of urgent and increasing importance. The various churches have their own building and development committees, but co-operation would certainly be an advantage.

Schools, including nursery schools, will be provided by the local education authority, and the importance of bringing in the education authority from the start so that adequate and timely provision may be made for schools cannot be exaggerated. There is, however, no need to consider school sites at length here as the subject has received specialist study. Education will play a larger part in the life of the new towns than elsewhere, and must, indeed, do so if the towns are to be successful, for education is one of the main functions of a town. Provision ought to be made for education, including adult education on the most ample scale that the local education authority is able to undertake. There will also have to be provided in each neighbourhood child welfare, medical, and dental clinics; a branch library, a hall for dances, meetings, and amateur plays; a club; licensed restaurant; swimming bath; and laundry facilities. A cinema could be provided on a commercial basis, but the development corporation ought to organize cinemas in the neighbourhood units as a whole to be run as part of the communal activity of the town, the profits from the cinema being devoted to each neighbourhood's communal services, club, etc. There may be difficulty here owing to the influence of the film-renting circuits; but the difficulty should not be allowed to stand in the way of the handling of this popular form of entertainment on a social basis. An attempt was made to do this at Welwyn Garden City, and the failure to carry it out was one of management rather than any inherent difficulty. The important point is that the communal buildings should be built as a unit, ample space being allowed for them. Haphazard siting of such buildings has much to do with their inefficiency in old towns and in housing estates where attempts have been made to supply them. These buildings should be regarded as expressing the urbanity of the community spirit; they deserve the best architectural treatment and the best work ought to be expected in them.

### § 10

The greatest possible personal elements of skill, knowledge, and invention, though without any attempt to assert mere individuality, should be encouraged in the building of each of the neighbourhood units. Standardization should be observed only in those parts of the building schemes that lend themselves to it, without creating sameness and monotony: standardization can become a substitute for work and thought, and is not to be tolerated for its own sake. Houses of all kinds are required, small and large, and without, as we have said, recognizing the difference between working-class and middle-class houses by building them in groups of 100–300 families as has been proposed elsewhere; instead variety, personal taste, and the desire to meet human needs should be the predominating influence throughout every neighbourhood in the town as a whole. The shape of neighbourhood units should vary, and variety should be observed in the

social amenities they offer. Standardized community centres would be an abomination, and though each neighbourhood will require its shops, restaurant, public hall, meeting rooms, etc., interchange among neighbourhoods should be allowed for. Thus there might be a small cinema in one neighbourhood unit and a much larger one in the next; in another, a large hall for two or more units, or in another a larger restaurant than in some others, and so on.

Although some of the matters discussed in the preceding paragraphs are not mere matters of planning, being within the sphere of social organization, they are discussed here because the town-plan should not be looked upon as mere plan-making, for its preparation and execution as a continuous process should have lively and intimate appreciation of the social needs and the changing life of the community.

## § 11

The main centre of the town, with the shops, town hall, and chief civic buildings, educational, medical, entertainment, and social, will provide the largest architectural scope. The greater number of these buildings will fall within the duty of the development corporation to provide, so that the architectural staff will have plenty of work upon which to exercise its skill.

As far as possible an approximate list of buildings required in the town centre will now be set down:

*Offices for the development corporation.* This must be a building that indicates the importance of the corporation, having dignity, and possessing good public accommodation. This building the public should be encouraged to visit, so that it should not be planned and administered as a Government department at which passes have to be shown or forms filled up, and where every caller is scrutinized. Here the town-plan should be exhibited, with plans of prospective development, and the information office of the corporation should be well staffed and equipped to be able to give all required information to visitors and inhabitants. The building will need to accommodate the large staff of the corporation, also the governors and rooms for their meetings.

*Offices for the local authority.*

*Post office.*

*Employment Exchange* and offices for Government departments.

*Offices* for solicitors, accountants, architects, and other professional and commercial purposes.

*Banks.*

*Health centre and club.* The model for this should be the Pioneer Health Centre at Peckham, and with it should be combined a social club for the town as a whole, with a covered swimming bath, gymnasium, drill hall, dance rooms, restaurant, music practice rooms, etc. The medical activities of the town should be centred here. The neighbourhood clubs and medical and other clinics should be associated with the centre. The development corporation should provide the finance to put this organization into working order over the first few years as part of the cost of the development of the town.

*Technical school.*

*School for adult education.* The model for such a school is that of the City Literary Institute built by the London County Council.

*Theatre.* A permanent town's theatre with a repertory company should be provided with means of establishment in association with the Arts Council.

*Amateur theatre.* A town's theatre for amateurs is also required, with accommodation for rehearsals, scenery making, property store, etc.



*Concert hall.* A hall for meetings and concerts.

*Library.* With an adequate reference library and reading rooms.

*Museum and art gallery.* A museum is the home of the muses and should be a centre for all the arts and sciences.

*Hotels, licensed restaurants, and cafes.*

*Cinema.* One large and one small. Note that there will be cinemas in the neighbourhood units

*Public market.*

*Bus station* with adequate public accommodation, and properly supervised car parks, with accommodation for bicycles.

*Garage.*

*Fire station.*

*Departmental stores, shops, and warehouses* for retail distribution.

No doubt the list could be added to. These civic buildings should not be spread about the town, for they have relation to each other, and for the sake of architectural coherence and social standards they should be designed and carried out as a whole. Indeed, not the mere design but the conduct of all buildings concerned with social affairs, the arts and sciences, and entertainment should be co-ordinated; they should not be regarded as independent undertakings with no more than a nominal acquaintance with each other. These are matters that should be considered of the greatest civic importance. Here, indeed, there should be the utmost experimentation and freedom for each new town. We have no really modern civic centre in this country. In the new towns there should be fundamental thinking upon how the finest qualities of our civilization in the arts and sciences of living in communities can be given expression.

As the new towns will be carried out as complete enterprises, furnished with the necessary capital, and with no check upon their development beyond that caused by shortages of the necessary labour and materials, these buildings can be provided from the beginning, certainly within the first five years. This will be the new town's most marked difference from the two garden cities, in which, apart from the various office buildings, shops, banks, and cinemas, such buildings do not even yet exist except in a temporary or preliminary form. Letchworth, after more than forty years, has council offices, and the first units of a permanent library and museum, and of course it has had for years commercial cinemas; but it has no public hall, no hotel, no theatre, no health centre, no club, no technical school. Welwyn Garden City has its small council offices, it has a fine large departmental store building, with a social club, also two large restaurants, but no public hall, hotel, or technical school. Though there are sites in its civic centre, they are empty and its social poverty is great. The absence of these civic buildings and the fact that for a long period even the company's own offices were but temporary buildings was a handicap upon each town's growth and created a sense of impermanence from which the new towns should not suffer.

## § 12

If the advice of the Reith committee is followed, the development corporation will design and build the shops and let them on lease. The planning of the main shopping

centre will provide an opportunity for experiment in the lay-out and the arrangement of the premises required by the different trades. There will be need for a co-operative store, at least one other departmental store, and individual shops. The different types of buildings should be grouped, and the whole treated as a unit.

This will be the largest single element, and the shops should not have buildings for other uses spread among them, as much concentration as possible being aimed at in their lay-out. Shopping streets should be reasonably narrow, and it is not advisable to have shops on both sides of a wide boulevard or square, for traffic in a shopping area should be reduced to a minimum. The shops will have their own traffic problems, first of goods inwards and outwards, for which provision must be made by service roads, kept strictly for that purpose, and secondly the needs of the public using the shops. People move from shop to shop on foot, but come to them as much as they can by bus, car, or bicycle. Although shopping streets should be made pleasant they should not be obstructed by trees, shrubberies, lamp standards, advertising boards, or anything else. Access for buses and motor cars has to be provided, and garaging accommodation must be adequate. There should be good street lighting.

It is impossible to give any guidance as to the number of shops required. Theoretically, perhaps fifty shops could serve a town of 50,000; but what is theoretically possible would be practically undesirable. In shops, the freedom of the consumer means the exercise of choice, which is possible only by the existence of a number of shops. What the number should be is the question. There is a limit; it is normally reached, perhaps overreached, for every one agrees that we have too many shops, by the more or less free operation of the market in shop sites. In planning, however, the free market is replaced by control, and for proper control knowledge is needed, and, more than knowledge, a sense of public right. There are two main categories of shops, those that serve households, and those that provide personal services; but they overlap. What is needed is more careful study of the facts than has yet been undertaken, so that the number of shops required for a rational system of distribution could be ascertained, with provision for additions beyond what is necessary. There must always be more shops than is necessary, or justice cannot be done.

A factor of importance, about which there can be little doubt, is that there will be developments in shopping technique and public requirements in the not distant future. We are entering a phase in which people will have more money to spend than at any previous time, but owing to prevailing restrictions in the supply of commodities of all kinds, we have not seen the effects of increased purchasing power upon trade, except that all retail distributors are making large profits, with no trouble to themselves and without need to attend to any of the normal requirements of customers that have hitherto been respected by tradesmen, including standards of service, value for money, range of choice, and so forth. How long this unsatisfactory state of things will continue we do not know, but one day it will end: it should be ended by shopkeepers taking a more conscientious view of their functions, to say nothing of displaying more efficiency

and enterprise than we have recently become accustomed to. It remains to be seen what shops will need in the way of space and equipment in the future, or what demands will be effective when the public is in a position to choose among tradesmen, but there are taking place considerable changes in the display and handling of goods. Whatever is done in the next few years in building shop premises in the new towns ought to be looked upon as tentative and experimental. The shop premises ought to be so constructed as to make fundamental structural alterations possible from time to time, and perhaps at least a proportion of shops should be of a temporary character. The experiment of building shops on two floors with covered approaches might be made for the sake of securing height in these buildings. It is necessary, however, that the shops should make the best possible impression upon visitors and the inhabitants without any aspects of niggardliness or mere improvisation, for people have the habit of judging a town as a place to visit and its merits as a home by its shops. The subject is of great interest, and deserves the most serious attention. Unfortunately there are few people whose advice on this subject is of value.

Provision will have to be made for buildings for a certain amount of wholesale trading. Advertising will have to be considered in connection with shops. It goes without saying that all exterior advertising (including shop signs) will have to be rigorously controlled; a standard should be set, with which traders should be required to conform.

### § 13

A market should be included in the shopping area, at first of temporary construction and with space for extension, but it should be well equipped and maintained in a clean and tidy manner. A market is most necessary for garden, market-gardening, orchard, and farm products. It should be started in a modest way, and requires fostering and close supervision, but it could be made a great public convenience. Neither Letchworth nor Welwyn Garden City has a market. An attempt was made to establish one at Letchworth, but without premises or any facilities; it failed, and the attempt was not renewed. At Welwyn Garden City the urban district council considered a proposal for a market building, but it was opposed by the garden city company and the local shopkeepers. No doubt markets have an influence upon prices; they attract trade and for that reason alone are not disadvantageous. The Reith committee proposed that sites should be reserved in the new towns for the purpose, and remarked that a market 'might be useful before the shopping centre is fully developed.' Its usefulness, however, is likely to increase with the development of the shopping centre. A market to be successful must not make high charges to stall-holders; at the same time it needs to be well designed, constructed, and managed, and it is not easy to fulfil all these requirements.

Restaurants, tea shops, cafés, public-houses, and hotels are matters to which attention is required from the start. At Welwyn Garden City, restaurant facilities for workmen,



the company's staff, and visitors were provided in temporary premises before anything else was done. Hostels and hotels are needed and their building should have an early priority. The Reith report gives attention to this subject and has some interesting observations. The committee recommends that no building be allowed a licence to serve alcoholic drinks 'which does not provide food in some form.' The sites of new towns are likely to include one or more existing licences. Where village 'pubs' exist they should be continued and improved; but new licences should not be allowed for mere public-houses, even on the higher standard observed by brewers to-day, in which food takes often a minor if not a nominal place; they should be based on the supply of food and entertainment as a primary element. In fact, all licensed premises in the new towns should form part of a community building or buildings, and be under the management of the body responsible for such buildings. (The subject is further discussed in the notes at the end.)

#### § 14

The industrial area is a subject for another chapter. Its siting and lay-out are, of course, a structural factor of the plan. Agriculture also comes within the terms of the town-plan, and is also discussed in another chapter.

In the town-plan are to be provided the sites for schools in addition to those in the neighbourhood centres. Except for technical schools and schools for adult education they should be on the periphery of the town area, or even in the agricultural belt, so that they may be adjacent to their playing fields. As already indicated, there is no need to discuss the schools in detail.

The town's playing fields will be in the agricultural belt, but lawn tennis, croquet, bowls, and other games should find a place also in the neighbourhood centres. Parks and open spaces with woodlands will be in various parts of the town where the land is suitable for the purpose. Park belts, which are merely architectural fancies of the moment, are not necessary. Open-air restaurants, and places where music can be heard, with an open-air theatre for the occasions when the weather makes its use practicable, should be provided.

The siting of cricket and football grounds must have relation to traffic requirements, so in a minor degree must the golf course. Commercial sport creates problems of its own, but some new towns may be in areas where it already exists, or where a new centre for it can be established. Anyhow, the means of dealing with the crowds that are attracted, parking of cars, and refreshments, are matters that cannot be neglected.

#### § 15

The road structure is the physical basis of the plan. This starts with the national high roads and with communications to and from the site. In some instances, perhaps many, improvement in road access beyond the site may have to be provided. The town-plan

is fundamentally a road-plan for the sake of communication within the town itself. Though there has, perhaps, been more discussion upon roads than upon any other element in town making, it can hardly be said that the problem has been solved. The demand for road communications exceeds the capacity of the best form of road design to-day, and the subject is under revision. One-way roads and twin roads, radial and ring roads, motor roads and cyclists' roads are various means of creating traffic efficiency; but there can be little doubt that the town's internal road pattern is an important element, and next to it comes effective means of controlling the use of the roads. These are matters of national concern, but beyond saying that the problems will have to be faced in the new towns and dealt with, and that contributions to the solution of some of the problems ought to be looked for, there is no need to deal further with the subject in these pages, except to say that it ought not to be left wholly in the hands of civil engineers, and that nothing those engineers say on this subject should remain unchallenged.

A certain amount of diversion of public rights of way and of footpaths will be needed; these will take their normal course, and should present no difficulty.

Street tree planting will require attention, and the observations made on the subject in the Letchworth and Welwyn sections of this book may be referred to.

Road names, signs, and direction indications should be ample, well designed, and rightly placed. At Welwyn Garden City attention was given to the use of good lettering in all public notices at the inception of the scheme and the practice thus established has been maintained; it has had a definite influence, even after many years penetrating to the railway company before its decease. Good standards in these matters are of social importance.

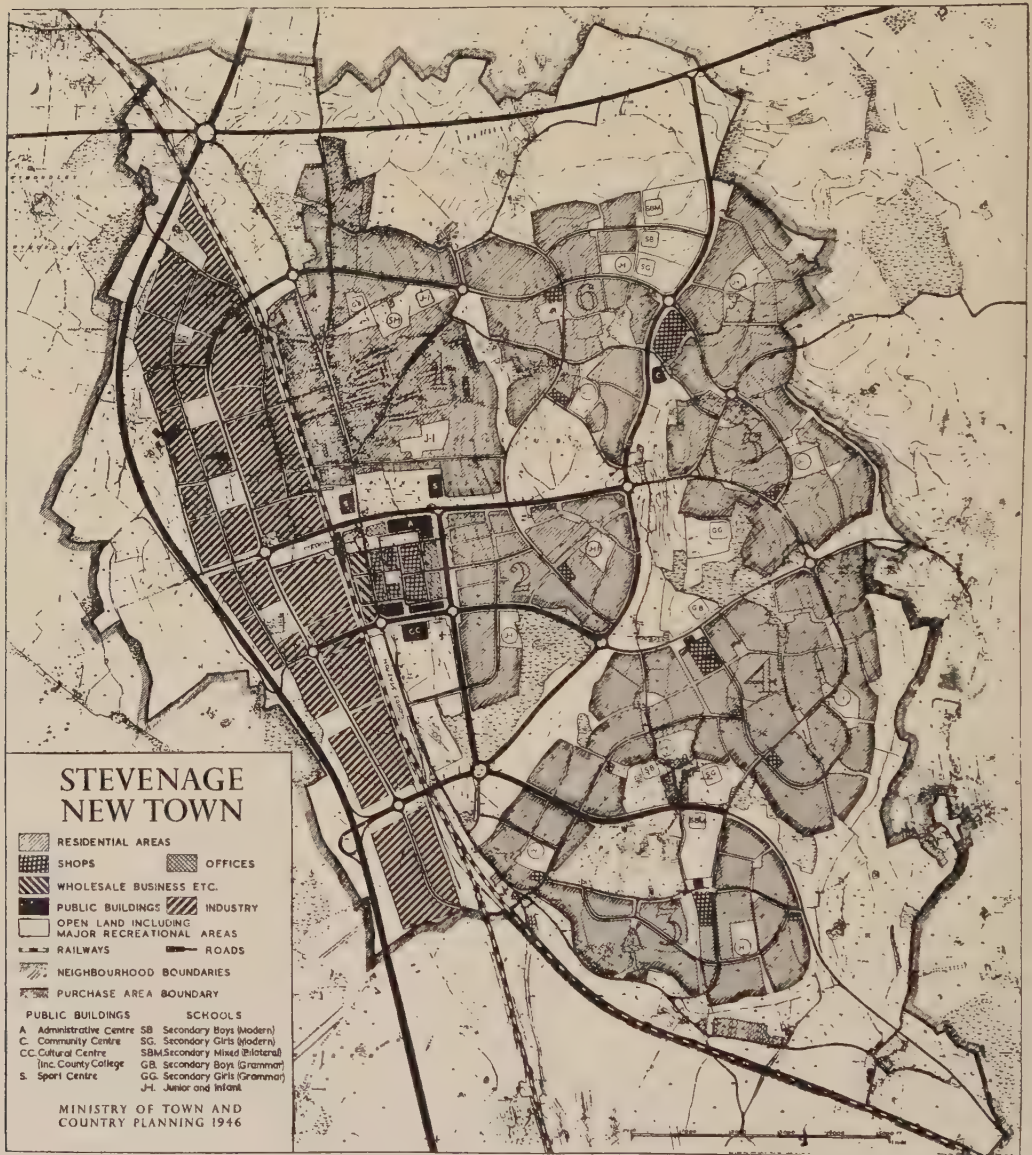
## § 16

No more than a glance at the plans of the new towns can profitably be made even at the last moment of completing these pages because all of them are in preliminary stages, subject to revision, and what might be said here would be out of date by the time it was published. However, it is possible to note what appears to be in the minds of those who are tackling the problems presented by some of the towns and how they are setting about their task. What is noticeable about all the plans so far put forward is that they are constructed on the principle of the neighbourhood unit; apart from that one feature there is no sign that they have got beyond acknowledgment of the formal models provided by the garden cities. One receives the impression that the idea of the neighbourhood unit was a godsend, for it enabled the planners to work on a constructive principle, and one wonders what they would have done without it.

The first of the plans was prepared for Stevenage in the offices of the Ministry of Town and Country Planning by Mr. Gordon Stephenson in 1946. The site is 6,100 acres, mostly well cultivated, consisting of charming country with small woodlands, and the old town of Stevenage with the Great North Road running through it. The plan



was in hand before the development corporation existed, and was possibly intended to be a model and to define how such plans should be prepared. A large number of



THE ORIGINAL PLAN FOR STEVENAGE NEW TOWN PREPARED BY THE MINISTRY OF TOWN AND COUNTRY PLANNING (1946)










conventional diagrammatic studies of the site and of the problems of traffic and other matters were made and a master plan was prepared for the population of 60,000, showing six neighbourhood units with populations of from 7,000 to 12,000, one of which





## STEVENAGE NEW TOWN

### MASTER PLAN DIAGRAM

	INDUSTRIAL AREA		RAILWAYS
	WHOLESALE STORAGE	R	RAILWAY STATION
	RESIDENTIAL AREAS	G	GOODS STATION
	TOWN & NEIGHBOURHOOD CENTRES	B	BUS STATION
	NEIGHBOURHOOD SUB-CENTRES	H	HELICOPTER GROUND
	JUNIOR SCHOOLS	M	MARKET GARDENS
	SENIOR SCHOOLS	ST	STADIUM
	COUNTY COLLEGE		

DATE: AUGUST 1948.

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DEPARTMENT OF ARCHITECTURE AND PLANNING

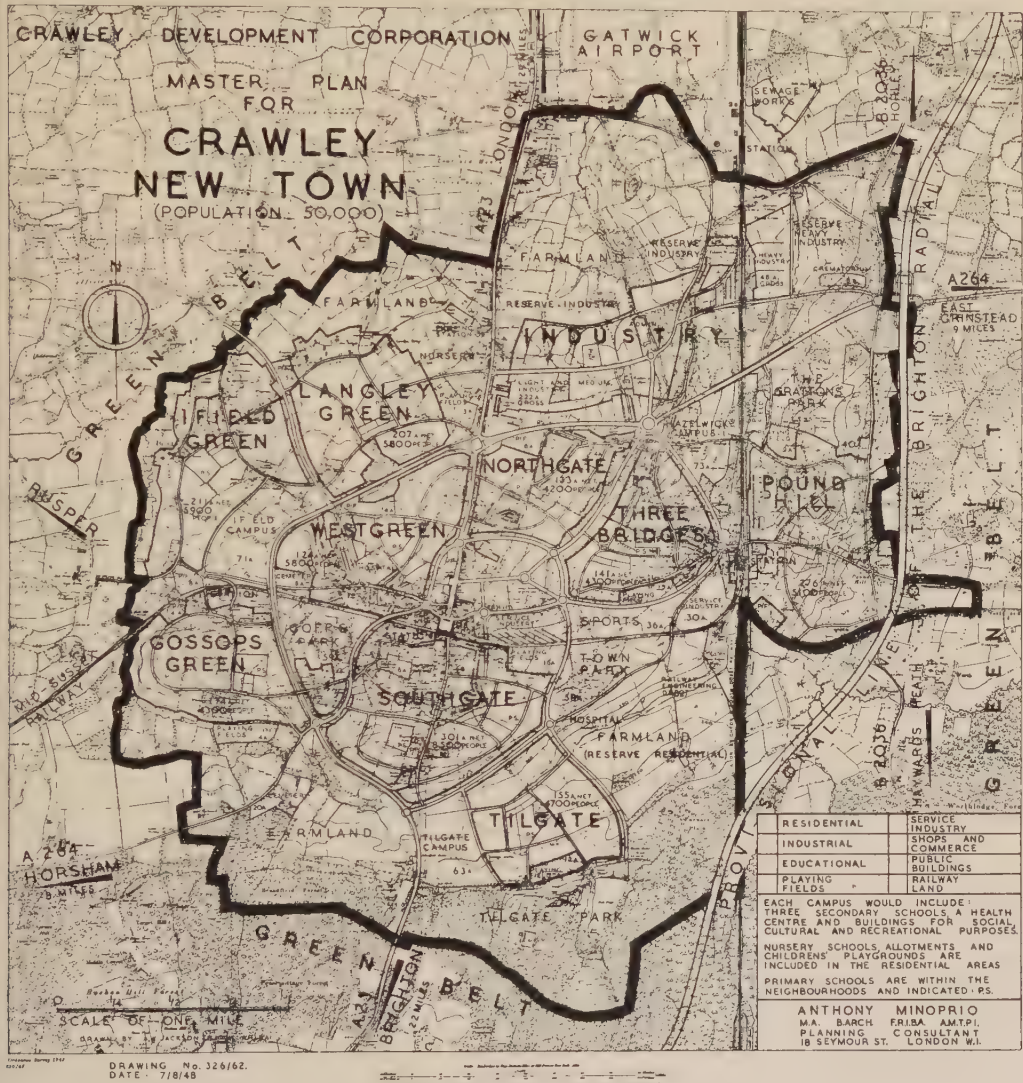
STEVENAGE DEVELOPMENT CORPORATION

THE REVISED PLAN FOR STEVENAGE NEW TOWN AS PREPARED BY THE DEVELOPMENT CORPORATION  
*Clifford Holiday, Chief Architect and Planner*

contained as its nucleus the old town with its population of about 6,000, an industrial area of 600 acres to the west of the railway with the projected motor road west of it, a new railway station to the south of the existing one, with a central shopping and commercial area of 100 acres, and a system of roads, some to be elevated, school sites, parks, etc. It was a skilful, expensive, unimaginative, and somewhat rigid plan. When the development corporation appointed its architect he came into possession of it, and, without starting afresh, succeeded in giving the plan greater flexibility, bringing its road structure more into agreement with the contours, thus making it less expensive, reducing the industrial area to 400 acres and increasing the central commercial and civic area to 150 acres. In general, the plan was tightened up and a more definite element of concentration given to the town. There are other problems to be faced, of which the proximity of the towns of Hitchin, Letchworth, Knebworth, and Welwyn Garden City is not to be ignored, also the fact that the big new Stevenage will be a serious problem for them too; and there is the sewage problem, which faces all towns in the Lea valley.

Crawley-Three Bridges has a preliminary master-plan by Mr. Anthony Minoprio, who was made planning consultant to the development corporation after another consultant had started on the work without completing it. The designated area is 5,920 acres for a population of 50,000. There are 2,600 houses on the site and 8,000 population, so that the scheme is an attempt to create a town out of two village communities, greatly in need of planning treatment. The site is not ideal, being cut by two railway lines, east-west and north-south, requiring expensive railway bridges, and by two main roads, London-Brighton and Horsham-East Grinstead. There is exceptionally heavy traffic on the first of these roads, and the projected London-Brighton motor way is not expected to be built for fifteen to twenty years: a delay that under the circumstances is not easily to be contemplated. The plan is reasonably compact, having Crawley as its centre, and is roughly circular in shape. It consists of a town centre of about 100 acres, with a new main shopping street of 300 yards at right angles to Crawley High Street. There is a certain amount of existing development in this area that will have to be got rid of for the sake of the plan. There are to be nine neighbourhood units with from 4,000 to 8,700 population each, six being extensions of existing development and three being entirely new; each will have a green, twenty shops, church, hall, inn, primary school, and playing fields. A feature are three 'campus' sites for secondary education with buildings for recreational and social purposes. Six modern schools are proposed, two grammar schools, and one technical high school to meet present educational aims. There are 300 acres of park land and four parks, two within a quarter-mile of the town centre; between the two villages there is a site of thirty acres for town sports. A system of footpaths throughout the town, independent of the roads, is projected, with associated cycle paths. The industrial area of 400 acres is on the north with the north-south railway running through it, heavy industry being placed on the east and light industry on the west; railway sidings are possible for half the sites. The industrial area is intended to have its own station on the main line, and the two existing

stations are to be extended. There are two large sites for service industries near the two stations and several other smaller areas for similar purposes. It was found that the



**CRAWLEY-THREE BRIDGES MASTER PLAN**  
*Subject to its approval by the minister*

sewage area had to be placed outside the designated area, to the north-east. The intention is that the entire area surrounding the town should be maintained as a rural zone, and the three county councils concerned have scheduled it for the purpose. Altogether, this seems a sensible plan and well thought out.



The Harlow plan by Mr. Frederick Gibberd, consultant to the development corporation, was published by the corporation early in 1948 with a report by the planner with diagrams, maps, and photographs of models. The plan was for a population of 60,000,



HARLOW NEW TOWN PLAN

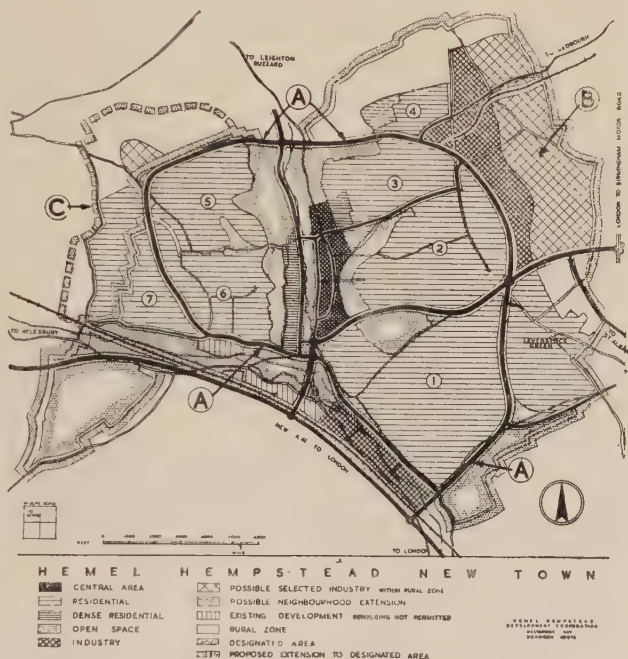
A diagrammatic presentation of the parts of the town.

and the planner said he had asked the question, 'How is the urban quality to be captured?' and answered it by applying 'civic design' to a civic centre, and by the rest of the town being 'broken down into compact units by areas of landscape.' The site lies to the south of the Stort valley and west of Harlow, and consists of 6,320 acres. On the north there is the main London to Cambridge railway line, and a projected new motor way, which will be the main approach from London, providing connections to Cambridge, Birmingham, and the north. The base line for the plan was placed on the north, the town lying to the south. The railway station, a business and civic centre were placed below this line on high ground overlooking the town. The industrial area was divided into two parts: east 265 acres, and west 190 acres, with a connecting road and access to

the motor way; the railway runs through the industrial area on the east and the total industrial area including roads, etc., is 565 acres.

There are thirteen residential areas, the largest 171 acres for 6,498 estimated population, the smallest 48 acres, 1,824 population. It was assumed that 24 per cent, or 14,400, of the 60,000 population would be engaged in industry; and an average of 25.5 persons per industrial acre was adopted with an average of 31.6 persons per net acre on the factory sites. It was further assumed, on the bases of the industries of the London boroughs expected to transfer factories to the new town, that the main industries would be clothing (26 per cent) and woodworking (14 per cent), with engineering (11 per cent), the other industries being glass, chemicals, textiles, leather, paper, printing, food, various metals and vehicles, the requirements of which appear to have been worked out theoretically in some detail. There is an imposing civic centre, including the main shopping and commercial centre, administrative, cultural, and entertainment centres.

This, as we have said, is not the place for a discussion of the plan in its present state, except to say that it appears to be well thought out within the conception of what a town should be that the planner appears to have. He envisages it as composed of detached elements separated by green strips of land. Unity is aimed at by means of landscape gardening. Certainly, it would be interesting for a town to be built upon such a plan, though we doubt if in fact it will be done, for a necessary element in a town is concentration, and somehow or other the parts that are dispersed will have to be brought together, and their separation by park-like strips, which is devoid of rationality, interfering with the structure of the town, ought to be greatly modified. Town-structure is not in highways or parkways but in the interaction of functional parts. It is noteworthy that in his report the planner does not use the word 'community.' In short, it appears to us that his present treatment of the subject is too abstract, and that the concrete existence of the community for the sake of which technical particularization is attempted is not sufficiently considered as the element required to give actuality to the plan.



HEMEL HEMPSTEAD NEW TOWN  
Diagram showing the town-plan.



At Hemel Hempstead the task of the development corporation is to extend a municipal borough of 21,120 to a population of 60,000. The designated area is 5,910 acres, but it has been found that further land to the west is required. A plan was prepared by Mr. G. A. Jellicoe as consultant to the corporation and published with a report in June 1947. It was exhibited in the town in the following September, and after revision was exhibited again, July 1948. Hemel Hempstead, an old town, developed in the past

fifty years mostly under the influence of a single industry, lies between Berkhamsted to the west, St. Albans to the east, Luton to the north, and Watford to the south. The designated area is to the north of the main railway line, except for a small portion. The original allocation of areas was:

	Acres
Central Commercial . . .	97
Industrial . . . . .	633
Industrial, outside the designated area . . . . .	93
Residential . . . . .	3,197
Public and private open spaces . . . . .	2,335
	<hr/> 6,355



HEMEL HEMPSTEAD NEW TOWN

Diagram showing a five-year plan of development.

included in the plan, which is under a process of considerable revision, and the new industrial area has been reduced, also the residential area. The existing town, intended to be the central area, is replanned. There are seven neighbourhoods of from 3,500 to 10,500 people. The plan shows a much dispersed town; its merits are fluidity and the attempt to secure the participation of the existing inhabitants. The problems here are of a highly interesting nature.

Peterlee in the Easington rural district of Durham is to be a mining town with a population of 30,000. Its architect, Mr. Berthold Lubetkin, of Russian origin, is ambitious, and noted for advanced ideas, as his advertisement for staff indicated:

A team of enthusiastic architects is to be built up for immediate work. . . . Architects with suitable qualifications and outlook are needed to participate in the construction of the most modern town in the world.

He invited applications for three senior architects (salaries £1,000 to £1,250) to be in



charge of three different fields of work: organization and research, planning and housing, and public buildings; architects (salaries £750 to £1,000) to work on specific problems; assistant architects (£600 to £750); and junior assistant architects (£300 to £450). This envisaged a large staff with the intention of working out the town's problems as fundamentally architectural. The project is to make the town a commercial, cultural, educational, and social focus for an area inhabited by 100,000 people, mostly in scattered mining settlements, and the outcome will be anticipated with much interest. The site is near the sea, with some highly attractive landscape, but with the largest pit heap in the country close by. Being designed for a mining community dependent upon coal pits with but a limited life, this town will present problems of its own.

Concluding this brief note, the writer makes the suggestion that the plans of the new towns, with accompanying explanations and reports, should be put on sale by H.M. Stationery Office. At present they are difficult to get. In fact any information is difficult to get; for the Ministry of Town and Country Planning does not regard it as within its function to supply it, and the development corporations have not put themselves in a position to do so. The subject is of immediate public interest, and the public ought to be fully informed on all stages of the work as it proceeds; for the building of new towns is of great educational value to the country generally. There should be a central office in London where the most complete information about all the new towns should be accessible. The office should be staffed by people who know the subject, public inquiries should be dealt with, and, where necessary, inquirers should be put into contact with the development corporations. In this matter of publicity, in the public interest as in their own, the development corporations should work together, as indeed they should in all things.

### § 17

As we conclude this brief comment on planning we reiterate our main point that the town-plan should not be regarded as static. Although the plan is a definition of intentions, and sets out the scheme of development, and although intentions should be fulfilled and schemes carried out, because uncertainty and whim ought not to be admitted as factors, yet the plan should be regarded as having life, being capable of development, and with elements that involve its own improvement, subject to the spirit that it has inspired. This means that in the course of time the plan may change, and, if the community has high vitality, it will be bound to change, so that while building, as the great Christopher Webb said, should be done for eternity, all buildings should have a use-life put upon them at the time of erection. By that means their replacement could be considered at a set period, and no building would be regarded as immovable and permanent. This is an important principle, which, as far as existing financial conditions make it possible, should be recognized in the plan of the town at the start. A plan made this year or next year cannot be right for the conditions of fifty years hence, and, for the sake of the life of the town, provisions should be made for changing it. A plan exists in its buildings, and to change a plan means to change buildings. Thus every building should

be given a use-life of so many years, at the end of which it should come up for consideration, when, if the utility and worth of the building justified it (it might, for instance, be itself a work of art, deserving preservation, or its mere utility might still be unexhausted), it could be continued for a fuller period, or removed and replaced by a more useful or better building. This principle should apply to houses, public buildings, industrial buildings, and indeed every kind of building, and provision should be made for it in the leases granted by the corporation. Thus the new towns could be kept free from obsolete buildings, the curse of all old towns. This is not a proposal for temporary buildings. On the contrary, every architect and builder should build his best, and aim at permanence. But no work of man is permanent. It is recognition of an incontrovertible fact of human life. Of course, the writer recognizes that finance cannot be ignored; that aspect of the subject is considered in another chapter.

### § 18

The continuing life of the community would be recognized in the proposal for placing a use-life upon buildings. Town-planning is a new art. It has to be a new art in every civilization, because it contains that civilization. In our western civilization, in its latest phase of industrialization, there has been no art of town-planning, at any time, anywhere. Therefore, though this has been a scientific age, there is no science of town-planning. There can be no science where there is no art. The builders of the new towns have to start at the beginning without a science. Certainly they have Letchworth and Welwyn Garden City to guide them, but these towns were projected and built under the conditions of transition. The builders of the new towns can but examine well these two towns and then draw upon their own experience, wisdom, and imagination; their integrity of purpose will enable them to draw upon the accumulated experience, wisdom, and imagination of mankind. Theirs is a great responsibility. Though the plan will be in the hands of architects, who will have to give form to it, town-planning is more than architecture. It relies upon architecture, but embraces also engineering, surveying, landscape architecture, economics, education, medicine, and the entire field of sociology.

We love the old towns that have grown under the influences of generations of men, each contributing something of its own character as men and women have lived their lives, expressed their desires, and satisfied in some measure their needs. Everywhere, however, the old towns are spoiled by industrialism or commercialism, which shows itself through the exploitation and callousness to which they have been subjected. The old towns, however, are without conscious design; for no one intended that they should be what they are. The new towns will be different. Intention and design are in their foundation. More responsibility will belong to those who build them than could be charged to any of those who made the old towns. The old towns belong to a condition of society that we hope has passed, the condition of social unconsciousness. And while we value the traditions of the past, we must appreciate the conditions under which building is done to-day and the responsibility in it that we share.

## CHAPTER IV

### THEIR TRANSPORT AND INDUSTRY

In order to prevent overcrowding in the great cities, with consequent congestion of the traffic, the Ministry of Transport must take a far-sighted view of the problem of the urban worker, and in conjunction with the Ministry of Health it will be its duty to encourage self-contained industrial centres away from the large congested areas of our present large towns. *Statement as to Railways* issued by the Ministry of Transport, April 1920

#### § 1

TRANSPORT and industry are interrelated, for without transport the division of labour upon which industry relies cannot be effected. It was transport that made the great industrial cities. To-day transport makes possible the dispersal from the cities. The railways were the means of industrial concentration, and electric traction, motor car, and aeroplane are the means of decentralization. Speed, increase of movements of goods and passengers, and economy of operation are the factors to which attention has been given, and now the need for planning in directing traffic flow and in the kind of traffic to be provided for is perceived. So powerful has transport become, however, through its mere mechanical efficiency, that it has been and continues to be developed for its own sake, so that it has reached the stage where it is unable to solve its own problems. The object of planning is to restore economic equilibrium to transport, but especially to put it in the instrumental position that is its true sphere. The enormous capital interests in transport, accumulated over the past hundred years, are one of the heavy burdens the present age has to bear; they should teach us that more fluid and less static methods ought to be recognized. To-day the development of air transport is the important new factor that may resolve much of the existing confusion and revolutionize all future transport arrangements: it too must be prevented from becoming static, as the earlier means of transport, once pursued with enthusiasm, had become.

#### § 2

The new towns depend upon transport by road, rail, or air, and sometimes by water. These are matters to be regarded first from regional and national points of view, and in that sense they fall outside the scope of this book, except that it is necessary to draw attention to their primary importance. The new towns will require their own transport for the movement of goods and people. They will need efficient transport to and from the cities of which they will be the satellites. For they will not merely draw off industry and population from the big cities; they will also make their own contributions to the cities both of commodities and people, and of trade, entertainment, and culture, just as they will be dependent upon the cities in a like manner. If there is decentralization of



large insurance, banking, and other offices, as there well may be, the need for quick access to the city will be essential. The towns will also need transport to the neighbouring towns, and to holiday resorts. When a group of these new towns exists, they will need transport to and from each other. The emphasis placed upon transport by the industrialists at Letchworth and Welwyn should be noted.

We may take as an example the first new town at Stevenage, which will not progress without fundamental improvements in transport to London; for the present railway service will not be able to serve an additional population of 60,000 people. The long-contemplated proposals for widening the main railway line and the Welwyn viaduct (may its beauty not be destroyed!) and duplicating the tunnels will have to be carried out, as well as electrification at least as far as Letchworth. The Stevenage, Watton-at-Stone, and Hertford line will no doubt be brought into regular use. In the new plan a new station, to be south of the present one, is indicated. Also the road access needs extensive changes, including the diversion of the Great North Road, which runs through the old town. Much of this is provided in existing plans, but more is needed. Better access to Letchworth and Welwyn Garden City will be required as well as to the towns of Hitchin, Hertford, and Luton.

### § 3

The new towns should have railway stations worthy of the new age to which they belong, with ample accommodation for passengers, and without the characteristics of mere emergency buildings possessed by most existing railway stations. The location of the station will be governed by many considerations. The ideal position is at the centre of the town; but that means, unless the railway lines are put underground, that the towns are divided into two or more parts by the railway running through them. The station, therefore, will usually be not at the centre; but good access to the centre is essential. The central bus station should be sited in relation to it, and there must be a large car park.

Railway sidings for industrial use should be laid out with regard to the more intelligent use of rail facilities for industry and with the idea of taking heavy traffic off the roads.

Industrial traffic should not be required to pass through the residential or civic areas and roads for bus routes should be designated. The use of roads for bus traffic that they were never intended to bear is a cause of great traffic difficulties in all towns.

Internal bus services will be required. The experience of Letchworth and Welwyn Garden City has been that the provision of these services lags far behind demand and that the London Passenger Transport, which theoretically has the outlook and certainly must have the staff to envisage the needs of these towns, to co-operate in their development, and to plan and provide bus stations and time-tables, has not even met the most elementary requirements.

## § 4

The attempts of industry to escape from the restrictions and congestion of the cities by building factories on the outskirts have provided evidence for generations past of the unsatisfactory conditions of the cities from the industrial point of view. It was upon this fact that the advocates of the garden city relied. Mechanical industry created the large towns; everywhere industrialists were so blind to everything but immediate interests that industry has created cramping conditions for itself. A survey of the industries in any large town will show that a large proportion is working under the most inconvenient conditions, without proper transport, in buildings that are unsuitable, with insufficient space, and without adequate light and air. It is amazing that manufacturers are content to suffer the handicaps that fall upon them. Some, no doubt, though conscious of the disadvantages under which they work, are unable to help themselves. Many have probably never fully counted the cost of working in an unsuitable environment. All the same there has long been felt a need to remove from central overcrowded areas to new sites, and this has indicated a need for the systematic provision of industrial sites under reasonably good conditions. Except for a small amount of private enterprise, and, in the years before the second war, some government enterprise (not undertaken, however, in the interests of industry), no such provision existed, though the two garden cities demonstrated what could be done. Isolated industries escaped on their own, but usually found that in leaving the cities they were creating for themselves over again the evils from which they sought to escape. Industries stay near the great cities because of the desire to be near the sources of labour as well as to secure electric power, railway facilities, and so forth; but the conduct of industry in suburbs or semi-rural districts is not really satisfactory, though it may sometimes be better than the slum conditions of the cities. It reproduces the jumble of houses and factories, and, though in some instances it may effect considerable economies, it is not suitable for industry in general, while at the best it causes much unnecessary movement of people and often of goods. The difficulty of finding suitable sites is a serious one, and much greater than is generally imagined. The shortcomings of the present position were well outlined in a note in the report upon the metal industry in the New York region, where some years ago the matter was studied; what was said there applies with equal force in this country:

The complaints made in the course of the interviewing point clearly to the importance of intelligent advice regarding the choice of industrial sites. The limitations of the various sections are seldom if ever mentioned by the organizations which are working for the development of particular portions of the area and are often discovered only when demonstrated by experience. Some of the manufacturers are bitter and resentful because they feel they have been misled in selecting their locations. It would seem highly desirable from the point of view of the future of the New York area as a whole that each part of the area recognize its shortcomings as well as its advantages and restrict its efforts to recruit new plants to such enterprises as can operate there to best advantage. *The Metal Industry in New York and its Environs*, p. 37 n. (1924).

The choosing of wrong sites for industry not only creates difficulties for the particular industry from which it is not always possible to escape (for it is a big undertaking to move

a factory from one place to another), but throws a burden upon the community at large. There has been little or no means by which manufacturers who want to move their factories could get advice or assistance to enable them to choose the best locations except for the publicity matter issued by enterprising cities to attract industries and by railway companies. This should now be changed by some common action between the new town development corporations; for at last we shall have a means of dealing with this matter.

It is a national duty to provide the best conditions for industry, a duty too important to leave its discharge to chance. By laying out and equipping suitable land available for manufacturing purposes, where industries can be grouped, and power, transport, and other facilities provided, the new towns will be making a valuable and long needed contribution to the economy of production, the efficiency of industry, and the health and contentment of the workers. The system of satellite towns will offer a great variety of sites for industry and enable a wide choice to be given to manufacturers.

Industrial sites depend for their successful development upon proximity to raw materials, power, labour, and the market for their products. It has long been recognized that the causes of the concentration of industry in the coal and iron centres and in the great commercial cities no longer have the force they once had, for power can now be got wherever a demand for it arises, and transport makes raw materials accessible almost everywhere and enables ready contact with markets to be made. Where transport and power can be brought, there industry can be carried on. That is what makes the decentralization of industry in satellite towns practicable. Where industry is established, there population will come.

## § 5

Some attention has been given of recent years to the lay-out of industrial areas in the so-called trading estates, and the formation of commercial estates in the London region, and experience has been gained of the needs of industrial firms, the types and size of buildings, water, power, and other facilities, disposal of refuse and waste, handling of raw materials and finished products, and so forth. There are also the old industrial estate at Trafford Park, Manchester, and the Slough Trading Estate, but more particularly the industrial areas established in the two garden cities, and the experience gained there has particular bearing upon the requirements of the new towns. It cannot be said, however, that anything in the nature of scientific knowledge is available, for the treatment of all these areas has been wholly empirical, except in the garden cities, and it is not easy to distinguish principles of development. A certain amount of association of factories takes place, and the linkage of industries, where factories work for each other, is of some consequence, but the organization of industry is so rudimentary, despite long years of industrial practice, that hardly anything worth calling industrial planning exists anywhere. The intense individualism of industrialists has



kept them apart. Where industries have been subject to natural growth, as in parts of London, the Potteries, Birmingham, Sheffield, Leeds, and the Yorkshire and Lancashire textile towns, a certain amount of common interest has been established, but especially there it has not been found possible to overcome extreme individualism and narrow separate interests. The reports of the various working parties have shown the deficiencies of industry which the new development councils are intended to overcome. We cannot be in doubt that the greatest change in our national economy is to be looked for in the future in improved industrial co-operation, and the new towns should play a large part in making such co-operation possible. They will offer the physical conditions that will facilitate this change, though it must be admitted that neither at Letchworth nor at Welwyn has co-operation of the kind that is required been much developed, because the opportunities for it have not been provided.

Only in creating and keeping together a pool of trained labour has the localization of industry made any distinctive economic contribution, but because no real responsibility was taken for it, no live interest taken in it, and no contribution made to secure its maintenance, the disintegration of labour that has taken place during and since the second war, which looks like having permanent results, has almost entirely removed this single benefit. The way is clear for a new form of industrial organization, including the organization of labour, and it should be possible for the new towns to play a distinctive part in carrying this out. A reasonable diversity of industries in a town is now looked for as a means of maintaining full employment; but we should regard it with caution as an attitude to industrial organization that inclines to depend upon the automatic operation of economic forces. Industries such as the radio manufacturing industry, which relies largely upon comparatively untrained and cheap seasonal labour, likes a location where it can get this labour most easily, trusting to employment being found by other industries for labour during its own slack times. Of course seasonal employment is inevitable in some industries; but they ought so to organize themselves that they can secure full employment for their workers either by their own efforts or in combination. At present we see operating a decidedly crude method of industrial organization, which should be regarded as obsolete. Workers should not be liable to be hired and fired to suit the needs of particular industrial firms, but are entitled to have continuous employment as part of their contract of service. This means that the organization of industry has to place the interests and welfare of the workers in the first place, which few industrial undertakings have hitherto been ready or had the means to contemplate. Diversity of industry in a town is an advantage up to a point; it could be made the basis of real industrial organization if the means for such organization existed; otherwise it is no more than a way of hiding unemployment in particular places, and disguising the disorganization of particular industries and of industry as a whole.

## § 6

The lay-out and equipment of the industrial area, the allocation of sites to manufacturers for the building of their own factories, and the erection of factories to let is the task to be carried out. The kind of industries and the size of factory units will be matters of first importance. All this will depend upon negotiations with individual firms looking for new premises, or with firms required to move from London or elsewhere under decentralization or reconstruction schemes, or with new industrial undertakings. For at least the first few years neither the new towns nor industrialists will have much choice. The towns will have to get what industries they can, or what firms are sent to them, and the industrialists will have to go where the Board of Trade advises them to go. But as early as possible the study of industrial suitability of the new town sites and means for the organized establishment of industries in them should be undertaken; for present studies are not sufficiently thorough, and the means of making them are amateurish and entirely inadequate. There has to be much more exact, informed, and intelligent guidance for industrialists than the Board of Trade has been able to provide. Public services, water, gas, and power supplies, and the disposal of trade wastes are all matters that have to be considered in every industrial proposal. There can be little doubt that sometimes an industrial unit is too large for any particular location and that it should be split up. Too much water or power may be required, or the waste may be excessive: all these demands have to be related to the total resources of the town; housing, too, has to be considered, for the number of people intended to be employed may be too many. There is a size beyond which any particular industrial unit should not be allowed to grow in any particular location. That should be accepted as an axiom in town-planning as well as in the economics of industry.

## § 7

Importance is laid upon what is called 'the synchronization of dispersal' of industry and housing. Industries should not be induced to remove to a new town before houses are available, neither should people be moved from London before industry is ready to employ them. Many people are worried about this aspect of the matter, and they are right, for much has to be done to overcome the real difficulties that will arise. What has to be considered is the time element. The removal of a factory ought to be prepared for well in advance, and the workers should be taken into the firm's confidence and be informed of what is proposed at an early date; they should not be kept in the dark or given only vague scraps of information. This is a matter for the firms concerned; but the information officer of the development corporation should take a hand in it. The workers should be encouraged to visit the new town and everything should be done to get them interested in it. The fact that the wives of married workers are an important factor should not be forgotten, and the interest of the wives should be aroused. As a

matter of common sense the building of the new factories should proceed with the building of the dwellings. No doubt a perfect synchronization will not always be possible, but it should be aimed at.

Some workers will not want to go to the new towns, but there is no doubt that the proposal to establish a new home under more or less ideal conditions and to work in a new factory building could be made to appeal to the ordinary intelligent man, as well as his wife, and also of course to the adventurous, so that the alert and enterprising among the workers will find the project of new surroundings attractive. Figures were published early in 1947 of the results of circularizing people who had applied for houses in the London boroughs on their willingness to move to new towns as part of decentralization schemes.

	<i>Tottenham</i>	<i>Edmonton</i>	<i>West Ham</i>
No. of letters dispatched . . .	7,775	2,500	16,000
Replies received:			
In favour of Harlow . . .	2,862	685	6,440
In favour of Stevenage . .	1,311	438	
In favour of either town . .	120	305	
In favour of neither town .	376	10	2,920
	<hr/> 4,669	<hr/> 1,438	<hr/> 9,360
Percentage of replies in favour of new towns . . . . .	94%	99%	69%

These figures show that even with the small amount of information available at the time, there was evidence of a desire to go to live in the new towns; had the question been put more attractively, the response without doubt would have been greater.

## § 8

The size of industrial units in the new towns will need attention. Many industrialists will want sites where they can expand their works, and means of expansion must exist; but the extent to which a works should expand on a given site, or in one town, is a matter for examination, as we have already indicated. Unlimited expansion is not to be contemplated. A site for a factory should be sufficient for its increase to a maximum size and number of workers, after which another site should be taken elsewhere in the town, or in another town. Overgrowth of industry is part of the disease of the overgrowth of towns, and units should not be allowed to overgrow. At the same time, negative policies ought not to be favoured. Industry in the new towns should be encouraged to grow, to develop, and to change, and the industrial organization provided by the development corporation should have an influence of positive activity. This indicates the need for development corporations to pay attention to the staffs they engage to do this work, and points to the establishment of well-equipped industrial departments.

The Reith committee recommended that the development corporation should build



unit factories and let them on short-term leases. How important this service can be to industry was proved at Welwyn Garden City, where more than one important industrial undertaking was enabled to establish itself in small premises in its early stages, and was given the means of expansion without having to tie itself up with premises that did not allow for expansion. Small factories of 1,000, 2,000, 5,000, and 10,000 square feet are needed, with rooms for offices; if built in units, several units can be put together for one firm requiring the space.

A good deal of experience of the kind of factory buildings required and the services needed for industrial areas has been acquired at the trading estates; but it is important that mere bureaucratic elements should not be introduced into the conduct of the industrial areas of the new towns. It is important, above anything else, that the industrial area should be treated as an integral part of the town.

### § 9

A unit system should be worked out for factory sites, and for the areas of buildings upon the sites. Most buildings will be single-storeyed, but two- and three-storey buildings will be required in some industries for the better handling of materials. Factory sites require to be deep, but waste land should not be allowed around factories. Rear access roads will always be required. The development corporation, as we have said, requires specialist officers able to advise industrialists, competent to prepare schemes and estimates, and with knowledge of industrial problems. The building organization will also need to specialize in industrial construction.

The principle of a use-life referred to in the previous chapter applies with full force to industrial buildings. As its application depends on the functional use of buildings, and is a practical not an abstract question, its value to industry would be great. We have far too many out-of-date industrial buildings, which are a handicap upon industrial efficiency. This principle would remove that handicap and help to increase efficiency.

A salvage system for industrial waste of all kinds should be set up at the start and operated thoroughly as part of the town's internal industrial organizations. This is not to be looked upon as simply a matter of tidiness and hygiene but of essential economy. The Ministry of Supply had an industrial salvage organization during the war that did an amazing amount of useful work in preventing waste and in the utilization of the waste of one industry in the productive operations of another, which ought to have recognition in industry as a permanent feature in the national economy. Hitherto waste has sometimes even been encouraged, and it has almost invariably been neglected. The subject deserves more serious attention than it has hitherto received; for though nature is wasteful, she is blind, and human society, which depends upon intelligence and thus should have foresight, ought to waste nothing.

## § 10

The new towns bring the place of work and the home near to each other so that the waste of energy, money, and time caused by daily travel is avoided. The burden of the travel to work that many people in London have to bear is heavy and exhausting. To have to travel for an hour, or an hour and a half or even two hours, night and morning, with several changes of vehicle, is not unusual. Workers are tired and dispirited before they get to their work, and utterly exhausted when they arrive home at night. No wonder that maximum effort is not put into work! Of course, the new towns will not abolish travel; for people may have to live in one town and work in another and may even choose to do so; but the new towns will reduce travel, and remove its burden altogether for large numbers of people. The benefits of working near one's home have been proved at Letchworth and Welwyn Garden City. They are manifold. One of the greatest is that the worker can go home for his or her midday meal. This means better food, and a better family life. It is true, of course, that under present conditions of food shortage and the housewife's difficulties, the return of workers for midday meals is not always welcomed. But those conditions, though it seems they may last for years, will disappear some time. The return home at midday makes a real break in work, and is good for health and well-being. The present writer has had personal experience of it, and has observed its good effect upon workers. When all or nearly all workers who live in the town are able to go home at midday, the demand for works canteens is reduced. Canteens must still be provided, however, for means of meeting the morning and afternoon break have to be found, and some workers will come from a distance and have no nearby homes to which to go, and accommodation has to exist for them. This could be done by a canteen serving a number of works or by a civic restaurant.

The new town brings factory and home near to each other, without the factory spoiling the home. In the old industrial towns we find the homes of the workers close to the factory walls, dismal rows of houses that were never fit for decent living; but it was desirable to have the workers close at hand and the workers wanted nearness to their work. In the new towns the factory can be within walking or cycling distance of the home, and yet the home is given an ample site, is part of the community, and is not overshadowed by the works. Home and work ought to be related, and the need to separate them has been one of the evils of industrialism. How can a worker be made to feel that he is part of industry, that he is a partner in the works, unless there is relation between his home and his work? The idea of the industrialist to get away from the factory and to live elsewhere has to be revised, and should be regarded as out of date. Not only the worker but the 'executive' has to bring together his work and his life.

The advantages to industry of satellite town development have been proved at Letchworth and Welwyn Garden City; but the new towns will carry these advantages much further, though it will not always be possible to state them in terms of money. Such benefits as low rates and rents, light, fresh air, good health for workers, and so forth,

have a definite cash value, however. Space for a well-planned factory and the benefits of a controlled industrial site have also a value that can be similarly stated. But the real value of garden city conditions will be enjoyed by those manufacturers who are planning for the future and look ahead. They will come to appreciate that the complete realization of their industrial advantages will depend upon a general system of satellite town building in which the interdependence of towns and their industries is recognized.

### § 11

Each of the development corporations will have to set up departments staffed with those who have knowledge of industry and able to provide the service that industrialists, managers, and workers require. The removal and re-establishment of factories is a complicated business, and the new towns should be able to provide any help that may be asked for, readily and without fuss. From the start there should be facilities for co-operation among industries, which is more easily secured in the early stages than later.



## CHAPTER V

### THEIR AGRICULTURAL BELTS

It is further asked: When are men, living in the same place, to be regarded as a single city—what is the limit? Certainly not the wall of the city. . . . ARISTOTLE, *Politics*

#### § 1

IN the new conception of town structure with which we are concerned in this book the idea of the agricultural belt is a main feature. It is the feature that is least mentioned, and in this chapter the writer proposes to do his best to set out the argument for it. No one can doubt that central in Howard's idea of the garden city was the interpenetration of town and country and that he aimed to end the divorce between them. At the two garden cities this was found to be the most difficult part of the schemes; for at Letchworth while the essential nature of the agricultural belt was recognized the economic position of agricultural land made the efforts to grapple with its problems abortive, and at Welwyn Garden City the lack of land to create anything but a nominal belt was the fatal defect in the more comprehensive efforts made there to bring about a harmonious relationship of urban and rural life. It is not surprising when the immediate significance of agriculture to towns is denied by modern economists that the new towns are being planned with nothing but the barest acknowledgment of agriculture, which ought to be regarded, none the less, as a cardinal fault in these collective enterprises. The argument is that without the integration of urban and rural economics and culture the basic conditions of human life do not exist, and that the town developer is taking but a partial view of his responsibilities when he ignores the rural aspects of his work.

That the agricultural belt of the new town is part of the town is a distinctive element in the contribution of the garden city to the structural form of urban life. In the garden city the rural population is brought within the influence and enjoys the benefits of urbanity, and town and country become one. The garden city agricultural belt is not the 'green girdle' of town-planning architects, or the 'park belt' favoured in American cities, neither is it the 'green belt' or the 'rural zone' made familiar to us by the recent political use of town-planning. The agricultural belt is a wide stretch of food-producing land surrounding the town retained as an integral part of the town's economy.

#### § 2

The question of agricultural belts is as old as the establishment of towns. No one can study ancient and medieval town-planning without observing that the relation of agricultural land to towns was considered as of first importance. Sites were chosen and towns were planned having regard to the need for food supplies. The Greek cities

included the agricultural areas around them, usually something like seventy square miles, though Athens had much more; the Roman towns did the like. Roman London included what we now call Greater London within its sphere as its agricultural area. What has been called the 'healthy interaction of rural, urban, and commercial life upon each other' was characteristic of civilization at its best. The cities of the Middle Ages gave constant attention to their surrounding agricultural areas. The industries of medieval England, though mainly concentrated in small towns, were also largely scattered throughout the rural districts in the villages, and people often were engaged in agriculture in conjunction with some other occupation. It was not until the nineteenth century, when the rise of mechanical industry, accompanied by the development of transport and the growth of great wheat-producing areas in America, made possible the great cities, that the importance to urban communities of immediate contact with agriculture was totally ignored. The factory towns were populated by people practically driven from the land, who retained no energy, time, or taste for agricultural interests, and in the course of the last century the decline of agriculture as an industry caused the towns to make an irresistible appeal to the enterprising countryman, so that the great mass of the people of this country have now no longer even the remotest knowledge of agriculture as the fundamental industry upon which all other industry depends.

It has been the dream of many industrialists and the theme of liberal economists, that England should be the workshop of the world, and that the nation could afford to leave so primitive an industry as agriculture to less developed countries. During the two wars for short periods we learned the folly of that dream, for the inhabitants of cities had forced upon them the importance of maintaining their food supply; but the divorce between agriculture and other industry had had so profound an effect upon society that the lesson of the first war was quickly forgotten, and before we had recovered from the effects of the second our Government slackened in its attention to agriculture and still continues to regard it as in a secondary place. Yet we see to-day that there is little or no cheap food to be got from abroad, and that our reliance upon an imported food supply has brought the country to a parlous state. We have been accustomed, in England, to being unable to raise sufficient foodstuffs for our use; yet the position of the world food markets, the warnings that have been raised in the United States of America that even that country within a few years may not be able to supply itself with food for its own requirements unless it changes its agricultural methods, should arouse us to the need for developing our agricultural resources to the fullest extent.

The antagonism between town and country is fundamentally senseless; for the town is the farmer's market and the country keeps the town alive. There should be a common interest, and towns should be planned and extended having regard to their agricultural requirements. Yet even to-day, so far as they can do so, the towns continue to grow, as they grew throughout the great periods of industrial expansion, as though they had no concern with agriculture, and as though, provided they extend their boundaries and increase their ratable values, it is no matter what happens to food production. The

townsman's interest in agriculture is his interest in his standard of living, and he is foolish to ignore the fact that the steady covering up by builders of the agricultural land adjacent to towns is damaging to him, for it steadily raises prices and lowers quality. How many people realize that at one time Poplar provided a great part of London's food supply? So few that there is hardly any one to object when the process that turned Poplar into slums is continued to-day. The one gleam of light upon a new treatment of agriculture is in the new towns policy properly applied.

## § 3

What is an agricultural belt? The subject has already been discussed in these pages. It is agricultural land in direct and constant relation to a particular town. In a sense all towns or groups of towns have their agricultural belts. Even London has agricultural land upon which it depends, not only in the home counties, but on the plains of Canada and the Argentine. Indeed, in the largest possible aspect, the urban area of the world, considered as a whole, is surrounded by the agricultural belt of the world. Otherwise, how should we live? We live by virtue of the cultivation and care of land upon which food is grown. There could be no urban areas at all, no city industries, no commerce, no civilization, unless the inhabitants of the agricultural areas could produce not only enough food for themselves, but a mighty surplus for those who did not produce food.

Yet, for the purpose of a definition, we cannot take agricultural land in general; we must take particular land, and the following is an attempt at a definition of an agricultural belt: *The area of agricultural land surrounding a town, with which the town has direct and constant economic relations.* As the nineteenth-century theory of a cheap exportable agricultural surplus from primary production countries is now being displaced by the facts of a rising standard of living in those countries, and their gradual industrialization, the definition ought to be extended. It should have added to it the words, *and upon which it depends partly for its food supply.*

## § 4

If we look at this definition in the light of the two garden city schemes at Letchworth and Welwyn, we shall see the theory of the agricultural belt in practice. The agricultural belts of these two towns are the areas within their influence. We cannot confine attention to the land actually purchased by the garden city companies, for both were unable to get the extent of land they required. The land at Letchworth possessed by the company as an agricultural belt extends to 2,400 acres because the company happened to be able to buy the land; there was no other reason. At Welwyn the area is less than 1,000 acres for exactly the same reason. The real agricultural belt at Letchworth, however, stretches to Arlesey in the north, to Hitchin in the west, to the neighbourhood of Royston in the east, and to Stevenage in the south. It is the whole of



the area contiguous to Letchworth, which is influenced by it, has economic relations with it, and within which there is a constant flow of people to and from the town. At Welwyn the real agricultural belt runs towards St. Albans, Stevenage, Hertford, and Barnet, to the point, indeed, where the agricultural belts of those towns begin.

The distinction between the garden city and other towns is not that garden cities have agricultural belts and other towns have not, but that in the garden city the agricultural belt is recognized, to some extent it is defined, and, so far as it forms part of the garden city, it belongs to the unity of the town and is preserved, maintained, and developed equally with all other parts of the town. In other towns (except in the small country towns) with no community of interest between the surrounding agricultural area and the town itself, the country is merely not-yet-built-upon land. Said a writer on agriculture between the two wars: 'Educationally and morally, fifty thousand acres of land contiguous to the towns . . . would be of greater value than a wilderness of museums.'

### § 5

The economics of the agricultural belt depend upon its purpose. What is that purpose? Fresh air certainly, aesthetic value certainly, food production for and by the inhabitants most certainly, otherwise the thing is useless. It is partly a 'buffer' between the town and surrounding towns. The one thing it is not, is a luxury. Is the agricultural industry a luxury? The question is absurd. The underlying constructive idea of the garden city is that of uniting agricultural and urban interests so that together they may constitute a sound community; the agricultural belt is the means by which this unity is brought about. The essence of the thing is that the city consists of a built-up centre of commercial and industrial activity, together with a surrounding stretch of country in which agriculture is maintained with all the resources of organized society—the dependence of town upon country and country upon town being unequivocal.

Agricultural belts are most obviously a means of producing a substantial part of the food supply of a town. In milk and dairy products, the agricultural area surrounding the town should go a long way towards meeting the town's needs. Market gardening, fruit, meat, and other produce depend upon the nature of the land, but the maximum production of the largest variety of commodities will certainly be an economy. The extent to which the town's demands can be met will depend upon the extent of the belt, the suitability of the soil, and the skill and capital that are devoted to it.

The view of most agriculturists that agriculture is a purely rural matter with the parish as the unit of organization is as out of date as that of the townsman who ignores the industry entirely, and no less needs adjustment. In the garden city, the town as a whole with its surrounding rural area, including the villages, is the unit. This change of view, when recognized as it is or should be in the new towns, should prove of great advantage to the farmer, relieving him of his social and economic isolation and bringing to him and his workers the facilities of town life. At present the isolation of those who work upon

the land, the lack of amusement, culture, and opportunities for alternative employment that they suffer, are a heavy handicap upon agriculture. The motor car and motor omnibus, wireless broadcasting, and newspapers have mitigated the isolation, but only, it would seem, to arouse a greater longing for the delights and variety of city life. After the first war the Government found it to be practically impossible to get disabled men to settle on the land. Even tubercular men would not go there; for men do not like village life, they want the activities of larger communities, and this desire continues. The satellite town brings the town to the countryman. The effect of the building of the first garden city at Letchworth upon the surrounding agricultural district, as we have indicated in the second part of this book, has been to brighten up the whole countryside, and the agricultural population has been increased. One evidence of this was the activity of the rural district council in building new cottages after the first war throughout its own area. This was almost unprecedented. The farmer has been brought under the stimulus of the town and his industry comes into contact with urban industry. Thus the business ability that is devoted to other forms of production is made available for farming also.

## § 6

There is a sense in which the farming industry is exceptional. It operates by possession of a monopoly. That is to say, land, which is limited in amount, which cannot be increased, however greatly the demand for it may increase, is the means by which the farmer conducts his business. So long as he is in possession of it he excludes every one else. This gives the farmer an advantage, which, except to the extent that he is affected by foreign imports, reduces if it does not actually destroy competition; but it also throws upon him a considerable responsibility and makes it necessary for the community to take particular interest in his work. As the farmer enjoys a monopoly, the community is bound to concern itself with his use of it. If a farmer fails to make the best use of his land it is of more serious consequence to the community at large than if any other producer is inefficient, and even though he may make a profit in spite of his inefficiency the national loss is none the less real. It is necessary that the land should produce as much as possible. This, of course, was recognized during the war, and at least the principle of communal interest in the land has been maintained since; but natural complacency at the underproductivity of our soil is a national disgrace. All who are able to assist in or increase production should have access to the land; for products of the land are a vital necessity. The social interest is not to get as many men as possible to work on the land, but as many men as are necessary for complete efficiency of production. It is true, of course, that work on the land is in many ways healthier than work in factories, but that should not lead us to argue that as many men as possible should be employed upon the land. If that argument held good it would be an argument against the use of machinery and against all labour-saving devices. It is, however, economically

unsound to devote more labour to a desired end than is necessary, and all means for saving labour on the land, as elsewhere, must be used. Of course, in this matter there has to be a certain latitude for satisfying individual desires. If there are people who prefer to plough with horse labour instead of the tractor plough, they must be allowed to do as they please, so long as they get production.

It is possible, under the new conditions that might be brought about by the closer association of town and country, that the old type of farmer may go. Land could, at least theoretically, be worked by highly capitalized corporations operating over an entire agricultural belt, or alternatively by co-operative associations of farmers. We know only too well that the farming industry as a whole is undercapitalized and is conducted with a good deal less enterprise than urban industry as a whole. All who have studied the condition of agriculture are convinced that the industry is capable of immense expansion if it were better organized by individual effort, and stability given to it by its closer integration with the national economy. A decisive step in that direction would be taken by bringing agriculture into more intimate and constant relation with other industry, thus overcoming the self-centredness of the farming community, and removing its social ignorance and incapacity, which would be the results of establishing urban communities in the form of new towns over wide areas of the country.

If, instead of suburban building and the mere spreading of the cities, towns were brought to the countryside, the whole character of the agricultural problem would be changed. Farming is a business demanding skill, high technical training, initiative, and capacity for experiment, and would gain enormously by having the town as the centre from which its practical operations were conducted. Usually, when other industry has been considered in connection with agriculture, it has been under its domestic forms. It has now been generally contemplated that manufacture and factory life may become factors in agricultural development; but in the garden city idea agriculture and industry are not thought of as being brought together through handicrafts or the growth of peasant industries. What is aimed at is that factory workers and owners should come to have agricultural interests, that men should work in the factory as well as on the land when they are so disposed; and that such a disposition should be encouraged. Further, there should be connection between the demand for agricultural labour at such times as harvest and the release of men for that demand from other industry. The squalid circumstances of the use of urban labour for fruit-picking, hop-picking, potato-digging, and so forth would not arise under methods of agriculture organized on a rural-urban basis. What is necessary is not only co-operation among agriculturists, but co-operation between the agricultural industry and other industries, and to this end the new towns on the garden city model should contribute.





- |  |                               |   |                                |
|--|-------------------------------|---|--------------------------------|
|  | <i>Industrial areas</i>       |  | <i>Zone for high buildings</i> |
|  | <i>Zone for small houses</i>  |  | <i>New housing areas</i>       |
|  | <i>Allotment garden areas</i> |  | <i>Forests and meadows</i>     |

SKETCH OF KIEL (GERMANY) (1920), SHOWING THE GREEN BELT AND THE CITY LAND CULTIVATIONS

Based on the scheme of Leberecht Migge, and laid out by the Town-planning Department of the city. The first unit of 200 hectares, on land bought by the city for the purpose, has been carried out, divided into 700 allotments. The essence of the scheme was the systematic development of lands around the city for allotment gardens, cottages with gardens, and intensive agriculture to meet the food demands of the city. The scheme provided for co-operative working and the utilization of sewage and household refuse as fertilizers.

## § 7

In the new towns it will be possible for every house to be near enough to an allotment to make its cultivation practicable. Experience during the two wars showed what an enormous advantage it would be if every family had a piece of ground from which to keep itself supplied with vegetables. The small town up to fifty thousand could supply itself with a large part of its needs in vegetable products and fruit. Of course not every household would be able to run an allotment or would desire to do so, but with many of the inhabitants working allotments there would be a certain amount of surplus produce. A central distributive agency, such as exists at the stores at Welwyn Garden City, or a public market, should provide a means for the disposal of such surplus produce not only for the purpose of supplying those who have no allotment of their own, but to supply families with what they do not or cannot grow themselves. Some men have a special knack for growing certain vegetables which others cannot grow at all. New methods of handling vegetable produce are certainly urgently necessary. Vegetables get too much handling by the present marketing methods and there is too long an interval from the time they are harvested to the moment they reach the consumer, with great loss of vitamin value. Also present methods cause an incredible amount of waste and are very costly.

## § 8

The finance of an agricultural belt is not different from the finance of agricultural land-holding in general. There is, however, an economic difference in favour of such land in a belt, due to its incorporation in an area, part of which is urban, held in a single ownership. If it pays any one to hold agricultural land, it pays those who hold it adjacent to towns; for there is a well-known economic fact that land tends to rise in value for agricultural purposes the nearer it is to centres of population. The effect of the distribution of towns throughout the country over a much wider area than at present would be to increase the value of the agricultural land in their neighbourhoods as agricultural land. What gives value to land is, primarily, population, and the distribution of population in satellite towns would stimulate agricultural production and thereby increase agricultural land values.

There is nothing in the conditions applying to an agricultural belt to differentiate it from other agricultural land, except such differences as are to its advantage. It was said after the financial experience of Letchworth and Welwyn Garden City that garden city companies could not afford to hold agricultural land. It was true that the low return from the agricultural land was a burden upon them; but the view that they could not afford it was short-sighted. It was also suggested as an argument against agricultural belts that small holdings could not be developed without great losses. But there is no necessary connection between small holdings and agricultural belts around towns. Those belts must obviously be turned to their best economic use agriculturally.

To get the full value out of an agricultural belt needs time and capital; the texture of the soil may need to be improved; transport, buildings, plant, and labour are required, as well as readiness to accept new ideas and to undertake fundamental investigation into the agricultural potentialities of the area, free from prejudices, scientific or otherwise. Everywhere land is in need of capital expenditure and of real enterprise to bring it to the height of fertility. Drainage, hedges, roads, water, buildings, clearance from vermin, are all required. At least, the recognition of an agricultural belt relieves land in the neighbourhood of towns from the uncertainty that hangs over 'accommodation land,' giving it, indeed, an increased agricultural value by giving increased security to those who cultivate it. That fact, indeed, provides the basis for the necessary expenditure upon farming improvements.

### § 9

A function of the agricultural belt is to be protective of the amenities of the town, and in this respect its social, including even its financial, advantages are considerable. The belt surrounds the town in the same way as a garden surrounds a house, and the amenities and even the commercial values of the town benefit exactly as the house does from its garden. That is why a garden city can bear the expense of an agricultural belt, or, in other words, can afford a lower annual return on its agricultural land than upon its urban land. By contributing to the amenity value of the town sites, through which the property in the town may retain and even increase its value, the agricultural belt is, apart from everything else, economically justified. A further point worth making is that without the belt the land values created by the population of the new town would tend to spread themselves over the surrounding land. The effect of that would be to allow some part of the increment of value to escape into other hands and to encourage parasitic development on the outskirts of the town. So that the wider the agricultural belt the better.

### § 10

In the costing system of a new town, the expenditure upon the agricultural land to the extent that the price paid for it may be in excess of its agricultural value should partly be charged against the urban area. At Welwyn Garden City, for example, a proportion of the cost of the agricultural belt was included in the cost of the developed land. Instead of the agricultural land being held at the price actually paid for it, or at the average price of the whole estate, it was held at a figure upon which the net income of the land would produce the average return which the garden city undertaking had to pay upon its capital. To take a hypothetical instance, and using pre-war figures, if land were purchased at an average of £40 per acre, the net income for the agricultural rents being 3 per cent and the garden city being financed on the basis of 5 per cent, the cost of the agricultural land should be taken at £24 per acre, being the amount on which the net



income yielded 5 per cent, the balance of £16 per acre being treated as part of the cost of the urban land. To-day, however, there is not so great a difference, the cost of money being less and agricultural profits higher. It should not be overlooked that the value of the agricultural belt will become in course of time much greater than that of ordinary agricultural land, and once the town is developed the land, or much of it, is almost certain to exceed in value many times what was paid for it. That value would not, however, exist until the town had developed a considerable population, so that in the beginning provision may have to be made for the burden that it will cause.

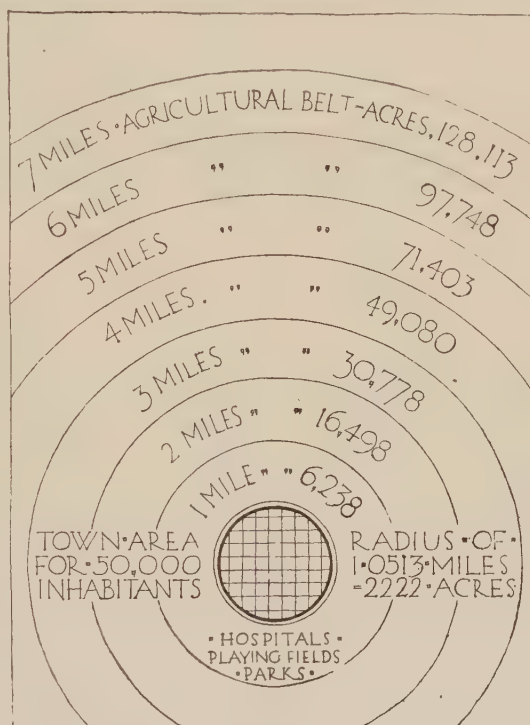
### § 11

The area that is necessary for an agricultural belt depends upon circumstances. The two main functions of the belt, food supply and economic protection, have to be kept in mind. Not always, perhaps only seldom, will it be possible to secure an area suitable in extent and character to meet fully the food demands of the town, and it is not necessary to make the attempt to do so except in milk production; but it is desirable that the belt should make a substantial contribution to the food supply. The land should be used for the purpose for which it is best suited. If for any reason it can only be used as parkland, or for grazing cattle, or as moorland, if it is bog or marsh or rock, then it will yield very little food. In practice, however, most sites will be found capable, and if not at once, then after improvement, of producing a fair proportion of the milk and dairy produce required, together with a certain amount of fruit and vegetables. As it is obviously desirable, other things being equal, to produce milk for the town in the agricultural belt to save costs of transport and waste and to ensure a fresh and clean supply, how many acres would be required for that purpose? It is not easy to arrive at an exact figure, for conditions of farming and farming practice and results differ materially, but the question is an example of the kind of questions that should be asked, to which the answers should be sought.

A minimum depth of not less than one mile is desirable so as to maintain a belt distinctively rural in character, which will at the same time separate the town from other building development. If the site of the town is partly bounded by the sea or by hills or some other delimiting natural feature, a protective belt will be provided by that means; but leaving out of account any such natural features, the extent of agricultural land needed can be expressed in diagrammatic form, and the figures given in the first edition of this book may be repeated here. The area occupied by a town of 50,000 inhabitants, on a basis of 4·5 persons per house and 5 houses per gross acre, would be 2,222 acres. Such a town in circular form would have a radius of 1·0513 miles. An agricultural belt of one mile around this town centre would occupy 6,238 acres, a total of 8,460 acres, which we may regard as a satisfactory minimum. Letchworth has a town area of 2,182 acres for 35,000 persons and an agricultural belt of 2,380 acres. Welwyn Garden City has a town area of 3,282 acres for its projected population of 50,000, and nothing

worth calling an agricultural belt. The accompanying diagram shows the area of land comprised within belts of from one to seven miles in depth around a town of 50,000 inhabitants. If towns could be constructed on ideal plans at distances of four miles apart, each town would have an agricultural area of about fifteen square miles; the majority of the workers on the land would be able to live in the towns, and the workers who had to live actually on the farms would be close enough to the towns to enjoy all the facilities of town life. In the agricultural belts could be placed hospitals, playing fields, and parks, which would be an economy.

Reference has already been made both to the Reith committee's proposal that the 'perpetual belt' should be, 'on average,' three-quarters of a mile in width, which appears to have been adopted by the ministry, and to the present writer's opinion that the area is too small. To think of so small an area is to treat the agricultural belt merely as a 'girdle' or as an urban amenity, and the committee's suggestion that the development corporation should take an interest in the belt, though well meant, seems perfunctory:



The agency might also promote certain central services on behalf of producers—such as those developed on the estates of the Land Settlement Association—whereby producers could obtain the advantages of, for example, central dairying, organized buying and selling, co-operative use of agricultural machinery, and possibly the processing of vegetables and fruit.

The policy that is being adopted by the ministry of including within the area of the new towns only a comparatively small agricultural belt ought to be reversed. The town should be regarded as including a real agricultural area, and to leave this area subject to general town-planning control is not sufficient either for agriculture or in the interests of the new town as an entity. Unless the agricultural belt is regarded as an integral part of the scheme, as important as the industrial and housing development, and deserving of equal expert care, the new towns will fail in one of their essential functions. Therefore, the agricultural belt ought to be large enough to make a real contribution to the life and economy of the town, and the town's interest should be in an area large enough to make a real contribution to agriculture.

The agricultural belt is an element in the town-plan. That plan must include the

entire area, so that the countryside as such becomes a planning interest. This means the provision of roads, buildings, water, drainage, and electricity for rural uses, and the proper use of the land for the amenities of the townsman as well as for agriculture. Parks, playing fields, schools, and hospitals in the agricultural belt will be part of the landscape design of the town's surroundings, as will be also the farm buildings, the houses of the farmers, and the hedges and woodlands of the farms. All of this must be part of the plan, and arising out of it there should be revived in the mind of the townsman the understanding of agriculture and respect for it. This will be seen in the proper use of footpaths, the care taken in closing gates, the avoidance of litter, and generally a new attitude to the countryside.

## § 12

The extent to which existing towns have agricultural land within their areas is hardly realized, yet many towns could, if they would, acquire at least substantial instalments of agricultural belts by means of town-planning schemes within their own areas. In a return prepared by the Local Government Board so long ago as 1913, the areas of suburban land were given within the municipal boroughs and other urban districts in England and Wales. Agricultural land as defined in section 9 of the Agricultural Rates Act, 1896, meant any land used as arable, meadow, or pasture ground only, cottage gardens exceeding one quarter of an acre, market-gardens, nursery grounds, orchards, or allotments, but did not include land occupied together with a house as a park, gardens, other than as aforesaid, pleasure grounds, or any land kept or preserved mainly or exclusively for purposes of sport or recreation, or land used as a race-course. At the date of the return there were 1,136 municipal boroughs and other urban districts, and information was obtained from 1,076. The total area of these districts was 3,884,139 acres, of which nearly two-thirds, namely 2,533,035 acres, was agricultural land. Some of the land included as agricultural land was, however, mountain or moorland. The acreage of agricultural land varied from 22,000 acres (Holbeach) to 7 acres (Stow-on-the-Wold), and, 'leaving out of account two or three very exceptional cases where the extent of agricultural land in the district is small and the valuation is very high, the acreage value in the several urban districts varies from £4 or more to less than 1s.' The statistics given in the table opposite were examples of towns with a population in the neighbourhood of 50,000 persons. These figures are old but they indicate a position that has not substantially changed. The ability of the towns referred to above to preserve their agricultural land, much of which has certainly gone since 1913, though the areas of some of the towns have been extended, is restricted by vested interests of various kinds and by the fact that some of the land has a prospective building value. But the outskirts of the towns could be preserved were the local authorities alive to their opportunities. In garden cities, however, the matter can be dealt with before vested interests arise.



<i>Town</i>	<i>Total Area (including Agricultural Land Acres</i>	<i>Area of Agricultural Land Acres</i>	<i>Urban Area Acres</i>	<i>Population (1911 Census)</i>
Aberdare	15,183	13,965	1,218	50,830
Barnsley	2,385	1,064	1,321	50,614
Carlisle	2,025	800	1,225	46,420
Cheltenham	4,726	2,659	2,067	48,942
Colchester	11,355	9,009	2,346	43,452
Dewsbury	6,720	4,299	2,421	53,351
Dudley	3,536	1,628	1,908	51,079
Eastbourne	6,833	4,075	2,758	52,542
Exeter	3,168	1,272	1,896	48,664
Gloucester	2,315	791	1,524	50,034
Keighley	3,902	2,551	1,351	43,487
Luton	3,134	1,421	1,713	49,978
Oxford	4,719	2,135	2,584	53,048
Swindon	4,265	2,624	1,641	50,751
Wakefield	4,059	2,624	1,435	51,511
Watford	2,064	474	1,590	40,939

## § 13

Among other services that the agricultural belt performs is the maintenance of tidy, orderly, and decent surroundings to the town. Few things are more saddening than the disagreeable accumulation of temporary buildings, heaps of rubbish, and vacant building sites that disfigure the edges of almost all towns. The preservation of natural beauties in an unspoiled, fresh condition around towns and cities is one of the urgent problems of the time. Woods, parks, hills, and streams, old villages and country towns make up the charm of the countryside. To lose them is to lose much of the beauty that nature and our forefathers have left us, part of a precious heritage that is at the very heart of love of home and country. The system of new towns is a means by which that may be preserved. But it is not merely that these special beauties should be protected, but that nature itself in its homely aspects, farms, homesteads, cornland, pasture, and market-gardens, should be maintained while our cities grow. That can be done by making rural belts part of the normal structure of towns.

## CHAPTER VI

### THEIR LOCAL GOVERNMENT

. . . neither city nor constitution . . . will ever be perfect, until fortune grant that some necessity encompass the philosophers, those few that are not evil but who are now called useless, so that whether they will or not they take charge of the city, and find the city obedient to them, or until upon those who now hold dominions and kingdoms or upon their sons some breath of heaven send a true love of true philosophy. To suppose that either or both of these alternatives is impossible I maintain to be quite unreasonable. PLATO

#### § 1

LARGE questions of local government arise in connection with the building of new towns; but large questions of local government are everywhere in pressing evidence to-day. The reports of the Local Government Boundary Commissioners, who have been engaged since early in 1946 in reviewing local government boundaries, and the criticism those reports receive, show how complicated is the subject. It is true that the present forms of local government date only from the latter part of the last century, though the essential features of local government belong to the democratic characteristics of English life. Central government has always been strong in England, but local government has always been a reality. Of recent years, and more and more since the second war, centralization has increased. Government departments are inclined to keep new powers within their own hands, and for a long time there has been a tendency to transfer more and more duties to county councils, which are the newest element in local government, and to give no new powers to district councils and ancient boroughs. There has been at the same time a growth in the number of county boroughs, a means by which the big cities take their affairs out of the spheres of county councils by acquiring the status of such councils for themselves. There is agreement, however, that the areas of local government have to be increased, but that the characteristics of local government have to be maintained. How this is to be done constitutes one of the major political problems now before the country.

The subject does not directly concern us here; but the building of new towns could in fact be a contribution to the solution of the problem, because they show how the overgrowth of cities may be checked and overcome, and a fundamental problem of local government is this overgrowth. The building of satellite towns does not need to wait for the reform of local government, as we have seen.

#### § 2

In all cities the gravest problems are those of housing and town-planning, and the demands for boundary extensions are forced upon them in the attempts to solve those particular problems. Few of the overcrowded cities can deal with their housing

problems without encroaching upon the areas of adjoining local authorities. We see the problem in its most aggravated form in the Greater London region, which is why the first new towns are to be built there. In London, however, and its surrounding counties, a new co-ordinating authority is the most pressing need, a subject the present writer has touched upon in *How Should We Rebuild London?* (Dent, 1945), to the second edition of which book, published in 1947, he ventures to refer the reader. The development of new towns not only in the London region but near all great centres of population would do more than any other measure to relieve local authorities of what appear to be insoluble problems, and would save them from reluctant decisions and ill-considered schemes, from the effects of which they would otherwise suffer for generations to come.

The contribution that the new towns make is that they take at least some of the pressure off local authorities in respect of housing as they enable new urban centres to be established with their own civic life and democratic institutions.

### § 3

The two garden cities of Letchworth and Welwyn Garden City were undertaken, as we have seen, without special powers. The garden city companies were landowners and did what any landowner could have done; except with the co-operation of the local authorities, they could do no more. That co-operation was only, however, reluctantly forthcoming, because the authorities within whose areas they came had not invited the establishment of the towns, and, almost unanimously, did not want them. In fact, they did no more (perhaps even less, if that were possible) for the companies than they might have done for private landowners. Only by much persuasion and persistent effort were they got to reconcile themselves to the situation at all. None of this was surprising. There was not, of course, much that they could do; for they were rural authorities and the garden cities were urban. The county council, which might well have done more, was polite, but non-committal, and highly doubtful about these affairs. At Letchworth practically the entire estate was in one rural district; at Welwyn it fell within two: this created further difficulties for the latter scheme; little could, in fact, be done until the land was brought within the area of a single authority, which in fact was done.

### § 4

Following upon this experience, the Reith committee recommended that where the site of a new town came within the area of more than one local authority an adjustment of the local boundaries should be made and the site brought within the area of a single authority. To give effect to this in the New Towns Act, 1946, the Minister of Health was given powers to make an order creating a united district of the site of a new town under the Public Health Act, 1936. The same minister may also authorize a development corporation to exercise the powers of a local authority with regard to sewerage and



sewage disposal. Under the New Towns Act, the Minister of Fuel and Power may vary the limits of supply of statutory undertakers of electricity and gas.

As an example of what will be required we may instance the proposal by the Local Government Boundary Commission in May 1948 concerning the Crawley-Three Bridges scheme. The area designated of 6,000 acres lay in the counties of East Sussex, West Sussex, and Surrey and in three rural districts. The proposal was to create at once a new county district within the administrative county of West Sussex. The original position of the area was as follows:

	<i>County of East Sussex</i>	<i>County of West Sussex</i>	<i>County of Surrey</i>
	<i>Cuckfield Rural District</i>	<i>Horsham Rural District</i>	<i>Dorking and Horley Rural District</i>
Area (in acres)	3,400	2,200	400
Population	3,500	6,200	200
Ratable value	£23,500	£44,800	£1,300

The heavy loss of ratable value that the severance imposes on the Horsham rural district is to be noted. A small additional area in the county of Surrey to form the site of a sewage disposal works for the new town has also to be included. This land was not in the designated area but has since been acquired by the development corporation.

Furthermore, the plan of the new towns, instead of being under the control of the county council as the local planning authority, is under the control of the development corporation, subject to the minister, who himself is required to consult with the local planning authority, and is authorized to approve the plan with or without modification.

We see, therefore, that the new towns will have important assistance in relation to local government. The development corporations are also expressly empowered to contribute to the expenditure of local authorities upon or on behalf of the new towns. As has been pointed out in an earlier chapter, the minister has to consult with the local authorities who appear to him to be interested, before making an order designating the site of a new town. He has also to serve on those local authorities the draft of the order, and the order itself when made. He has also to consult those authorities in the appointment of the members of the development corporation. Such consultation may be no more than nominal: in practice, it will be found that the minister will, no doubt, please himself.

## § 5

When a new town is established, it usually will begin with a rudimentary form of local government, which can be no more than a parish. At Stevenage, however, there is already an urban district council, which should be an advantage, so that the new town can start as an urban entity. Usually, however, new towns will start as Letchworth and Welwyn Garden City did, with a parish council, and for that purpose, and to make the

area of the town a separate rating area, a new civil parish will need to be created. The electors will be on the register of the electoral division which includes the rural district of which the site of the town forms a part, and will be able to elect a parish council, and to take part in the election of rural district councillors and county councillors. As a civil parish they will enjoy few local government powers, but they will at least have a council to speak for them, and to which they can speak.

The Reith committee recommended that when the population of the new town reaches 'about five thousand' an urban district should be formed. It said no more about local government.

## § 6

The association of the inhabitants of new towns with the body responsible for development should be provided for in some way. At Letchworth meetings are held between the directors of the company and a committee of the council to consider questions of development. At Welwyn Garden City the local authority was at first given representation on the board of directors of the company and reported regularly to the council on the work of the company. Neither of these methods proved satisfactory. At Letchworth contact between the two bodies is casual and by no means productive; at Welwyn the representatives on the board acted as directors, taking the responsibilities of directors, though they had no responsibility to the shareholders, thus creating a personal fusion of interests between representatives of one body and the members of the other body rather than association or co-operation between the two bodies as such. Although it was soon proved that the system was not satisfactory, as the present writer observed in the first edition of this book, it continued for many years, though it became more than useless, even dangerous in its results, until it was abandoned. It was, however, in its inception, a sincere attempt to bring about co-operation. The garden cities have not solved the problem. In the new towns a joint committee might be set up composed of equal numbers of representatives of the local authority and the governors of the development corporation to discuss questions affecting the town. The joint committee could act freely as all its members would be on an equal footing. Meetings should be held regularly on fixed dates, say once a month, and reports presented by the representatives to their respective bodies. Whether this would be an effective means of co-operation between the two bodies would depend upon the qualities of leadership displayed by each and the degree to which they really worked together; if successful, it would enable questions to be thoroughly discussed, and would provide for a real understanding of the different points of view.

The importance to the inhabitants of co-operation between the local authority and the development corporation will become greater as the development of the town proceeds; for the interests of the two bodies become more identified with the growth of the town, and by working together they should be able to deal with a large number of

problems with satisfactory results, and at the same time unite in making the town a desirable place in which to live. It must however be said that the co-operation of which we speak, while it depends upon the local authority having members and officials of the calibre and disposition to play their part, needs to be accepted as the responsibility of the development corporation. Whatever the difficulties, the corporation must overcome them. It will not be sufficient to find fault with the inability of the local people to take long views, or to be concerned with anything beyond petty detail, or even to show themselves unable to take any constructive part at all: they will have to be led into collaboration.

Much will be gained in a new town by friendly relations between the corporation and the inhabitants individually. It is not to be expected, of course, that everybody will always be satisfied, and there are generally to be found people who take pleasure in arousing controversy for its own sake. The development corporation has to keep in mind its obligations to make provision for the scheme as a whole, while the inhabitants, or some of them, may take a more restricted view.

## § 7

In this connection it is well to remember that the constitutions of the Letchworth and Welwyn garden cities provided for the freehold of the estates being taken over by the local authorities concerned at some future date (though, as explained, the Welwyn company has modified its constitution). That date may be assumed to be the time when the scheme has been substantially completed, and when the local authority is in a position to accept the financial obligations involved. There was no compulsion upon either of the garden city companies to transfer their property to the local authorities unless they so desired, the powers being entirely optional; it may, perhaps, be taken for granted that when the time comes for such a transfer to be practicable the Letchworth company will be favourable to the proposal, and Welwyn would have been disposed to consider the proposal when it appeared to be in the interests of the scheme that it should be done. The responsibility for the schemes being carried out and maintained in accordance with the original idea of the promoters lay upon the garden city companies, and it would undoubtedly have been wrong for them to consider divesting themselves of responsibility without adequate guarantees for the maintenance of their schemes. As it happens, however, neither of the district councils has ever shown eagerness to assume the responsibilities discharged by the companies. They have, of course, not the staffs, and the members of the councils have not the time for the work that would be involved.

An alternative to the transfer of the property to the local authority would be for the local authority to absorb the garden city company, which could be accomplished by taking over the capital of the company (which would require legislation). The advantage of such a course would be that the local authority would then be able to use the powers of a joint-stock company as well as its normal powers as a local authority,



which might be worth acquiring. Or, instead of absorbing the company, the local authority might make an arrangement with the garden city company under which, so long as the fixed interest or dividend upon the capital was paid, the actual administration of the company might be brought largely or wholly under the control of the local authority. Or, finally, the garden city company and the local authority might continue to exist side by side, without absorption of one by the other. This might enable the town to secure permanently the benefits of co-operation between the business management of the company and the local authority administration. Out of such co-operation might emerge a system of town management new to this country. The conduct of a town's business is already a highly expert matter, and in a garden city, largely free from existing municipal tradition, the expert and specialist conduct of local public affairs might be greatly developed. The subject is highly interesting, and may be worth pursuing at Letchworth in the not distant future; at Welwyn Garden City the minister has decided the issue; in the new towns it remains to be faced.

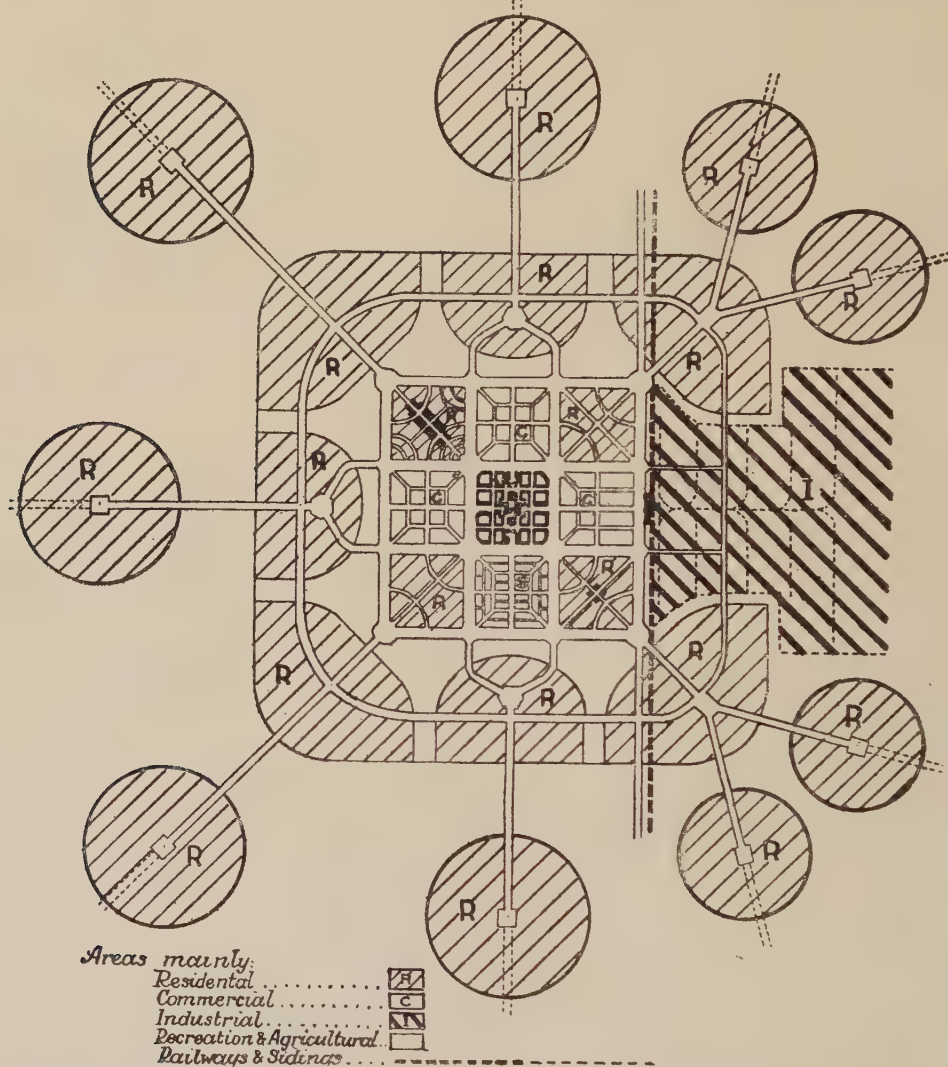
### § 8

When a new town is built under the New Towns Act, 1946, provision is made for the winding up of the development corporation. This may be done by the minister when 'the purposes of the development corporation have been substantially achieved.' He may then by order and with the consent of the Treasury transfer the undertaking or any part of it to the local authority, on terms to be agreed. Before doing so he has to consult with the county council and the local authority and also with any statutory undertakers, if part of the development corporation's undertaking consists of statutory undertakings.

Thus the district council of the new town could become owners of the town's site, the town's shops, many of its factories, and many other buildings, and owners too of the various utility organizations set up by the development corporation. It would be an extremely wealthy body with substantial revenues, which might well have a beneficial effect upon the town's rates. The order transferring the undertaking may contain provisions to extend or modify the powers or duties of the local authority. This is an important provision and seems to include all that is necessary to make a transfer complete and to provide for the full working of the undertaking by the local authority. But, of course, whether, when the time comes, the local authority will possess the staff or the will and the membership ready to assume the large responsibilities involved remains to be seen; it will take place, so the present writer thinks, only if the collaboration to which we have referred has been made a reality.

## § 9

It is of importance to remember that as under the garden city formula the local government areas of towns include agricultural belts, a new definition of local boundaries is



AN ADAPTATION BY RAYMOND UNWIN (1922) OF HOWARD'S IDEAS APPLIED TO A LARGE CITY  
WITH SATELLITE SUBURBS

This is really a system of dispersing the city over a large area and defining its parts by means of open spaces and cannot be regarded as a true expression of the original idea.

implied. On various occasions in connection with discussions on local government it has been pointed out that a rural district is an artificial creation for which there is but small local patriotism. There is little doubt that if the garden city idea were accepted, of

the small town as the agricultural centre, thus extending urban boundaries and abolishing the rural districts, there would be a substantial gain in local government. It is true that townsmen do not understand the conditions and requirements of agriculture, and that



A DIAGRAM BY ROBERT WHITTEN, AN AMERICAN PLANNER (1923), ILLUSTRATING HIS IDEA OF SATELLITE DEVELOPMENT OF A LARGE CITY

The satellites are connected with the city by park belts, and the land between them and the city is intended to be used for amenity purposes.

the interests of farmers and labourers are not identical with those of manufacturers and artisans; but it is a situation that has to be reversed. A large part of the economic interests of all workers in industry are common, and town and country have a common interest in the health, well-being, and economic security of all who live in them. That



is essentially what is aimed at by the garden city, to abolish this false economic and social separation between townsmen and countrymen. In the great city, with its large congested areas remote from all rural influences, and in the sparsely peopled country, remote from all the active life of the town, separation exists, but wherever the effects of that separation are observed and analysed and their results measured, they are seen to be great evils. The time has come for those evils to be overcome.

### § 10

What provision will be necessary for the continued growth of satellite towns? Towns that are living will grow, and, though their growth will in some measure be confined to rebuilding and reorganization within their own areas, that will not be exhaustive. We must therefore contemplate the extension of the town outside its agricultural belt, and, though the extension may be regarded in the first instance as a suburb or a village, there must be provision for its full development as an independent unit.

Industry may be established in the town, and if it prospers will grow. It may grow so vigorously that it may become too large for the town. In that case it must be split up and future growth be made a nucleus for another town. When industries become large, they become departmentalized. Is there any reason why departments should not be separated? Is there any limit beyond which a single factory becomes too large for the best economic results? Years ago the late Henry Ford answered the second question in the affirmative. (See *My Life and Work*, pp. 190, 191.) Anyhow, the possibility has to be faced that a single factory may become too large, if not for its own sake, for the sake of the town. Towns that have reached the limit of their maximum population must provide for extension outside their rural belts. And suppose building goes on beyond that belt? Suppose, for example, someone were permitted by the planning authority to put works there and build a small single-industry village. If it is beyond the agricultural belt, it will be beyond the town's boundary. Ought not the town to have something to say in a matter of this sort? Here we come again to the necessity for regional authorities. There is no escape from that conclusion.

Reference has already been made to the possible influence upon the plan and the very character of the new towns of the exercise by the London and Outer London boroughs of their housing powers. Many of these boroughs and urban districts, too, have to find accommodation for surplus population, that is to say people in industry for which they will have no room when overcrowding has been reduced. It was announced at an early stage that Tottenham, Edmonton, Walthamstow, Ilford, and Leyton were to be allocated sites at Harlow; Croydon, Coulsdon and Purley, Richmond, Barnes, and nine other districts at Crawley-Three Bridges; Hornsey, Finchley, Wood Green, Barnet, and probably Tottenham, too, at Stevenage; Harrow, Wembley, Willesden, and Acton at Hemel Hempstead; and West Ham, East Ham, Barking, and, strangely, Dagenham at Basildon. The appointment of two members of the London County Council upon the

development corporations for Hatfield and Welwyn Garden City may be an indication of what is intended in those towns. Through their large housing schemes these boroughs and urban districts will have substantial interests in the new towns, which cannot fail to have an effect upon them. Sites have to be selected and agreed upon, they have to be planned and the houses built; schools, community centres, and amenities will have to be provided; the types of houses, the rents, the people to have them, and subsequent management of the property are all matters in which the 'exporting' authority, the local authority in the new town, the county council, and the development corporation will be concerned, as well as various ministries. The Board of Trade will be interested in the removal of factories. Above everything else there will be the financial question, because housing schemes are burdens, the rents will not cover the total outgoings, and the ratable values will not be sufficient to yield the rates to cover the cost of education, main drainage, public health, main highways, and the social and recreational services required. Questions of subsidies, consents, and priorities of various descriptions will have to be settled.

Such complications are not regarded by the present writer as disadvantages, though to deal with them will test the powers of leadership of the development corporation. Local government collaboration in constructive work is of the highest importance, and the association of the boroughs with each other and with the town itself should result in civic enterprise from which valuable unlooked-for results may come.

## § 11

Satellite towns built around a great city must necessarily have economic and cultural relations with that city as well as the local government relations we have mentioned. Should they not have relations with each other? It is hardly conceivable that a number of such towns established near a common centre would not have common interests, and seek to combine those interests. This indicates a direction in which a further extension of local government may take place. If a series of new towns is to be established in Hertfordshire, will they not have common interests that may need expression? Those interests are not likely to be satisfied entirely by the county council. Indeed they go beyond the county boundaries, into Essex, for instance, and even further into the London region. Do we not touch here upon the means through which regional authorities may come into being? And a favourite word of our time, 'federation,' may have an application here. A federation of towns might in a modern form be a prelude to larger federations.

## CHAPTER VII

### THEIR FINANCE

The best way of binding a free society together is by multiplying reciprocal obligations, and creating a general dependence between all its members. SIR JAMES STEWART (1805)

#### § 1

THE accounts of Letchworth and Welwyn Garden City given in these pages show that the financial problem has been a central problem of new town development. It is not only that the amount of money required for such schemes is large, but that time is required for it to become revenue-producing. Among the lessons of the two garden cities was that as there was no means of meeting the investors' demands for an immediate return more such towns could not be built under the same conditions. The original shareholders in the first garden city had to wait twenty years before they received the permitted 5 per cent dividend upon their shares, and though in forty-three years they were paid every penny of the accumulated dividends from the start, the time-lag was too long. Had the prospect existed at the start of receiving at some time the increasing profits of the enterprise, delay would not have mattered so much; but that prospect was never present, for never can the shareholders get more than 5 per cent, and on a winding up no more than the amount of their original capital, plus 5 per cent.

At Welwyn Garden City, by treating as development costs the expenditure incurred in the town's development, including, we must note, interest on borrowed money, the company was able to show after the first year a balance on revenue account equivalent to 6 per cent upon the shareholders' money; but as the company did not have the available cash to enable a dividend to be paid (all its money being required for development), none was paid. The directors got alarmed at revenue balances when they had no cash; for all the cash they had was absorbed in meeting interest charges and in continuing the development of the town. So, at a certain stage, as we have seen, they ceased to discriminate between revenue and capital items, and allowed certain amounts that had hitherto been regarded as capital expenditure to fall upon the revenue account, extinguishing, or at least reducing drastically, the revenue balances for a good many years.

Furthermore, the company had to undergo two capital reconstructions, in the course of which the share capital was written down to a nominal amount, the story of which is told in an earlier chapter. This meant that the original shareholders, who held, however, only a comparatively small portion of the total capital, had not only to wait for a return upon their money, but lost the greater part of it. In the present writer's opinion there was no need for this to have happened, an opinion supported by the estimate that the present capital value of the enterprise greatly exceeds all the capital that was lost.



## § 2

Undoubtedly, the prospect of absence of return while the capital was fructifying has been a main stumbling-block to satellite town development; and the present writer's statement in the first edition of this book, so long ago as 1925, that no further garden cities could be established under the conditions that Letchworth and Welwyn Garden City had to observe, has proved to have been justified. Without an original capital investment of a large amount no scheme could be started, and there were insufficient means of providing that capital. It was not, in fact, an activity for private enterprise in its existing form.

It was because of these facts that the Committee on Unhealthy Areas over which Neville Chamberlain presided recommended in 1921, in connection with its suggestion for the establishment of garden cities, that financial assistance should be given to such schemes in the first stages. In its interim report the committee said:

The difficulty in starting such settlements is that industries can hardly be expected to move out to them in any number before housing accommodation and amenities have been prepared for the employees, or before adequate facilities of power and transport are available for factories. On the other hand, local authorities are not likely to consider providing houses, etc., in advance of immediate requirements, nor will manufacturers bear this cost themselves so long as they can find suitable accommodation within reach of existing labour centres.

It would therefore appear that the only way of escape from the vicious circle is by the intervention of the State, and that the investment of a considerable amount of capital must be contemplated in the building of houses and the general development of estates, the return upon which must be delayed for a considerable period. A good deal has been done already by private enterprise to develop garden cities, but in the opinion of your committee, development along these lines would be greatly stimulated and quickened if further facilities and encouragement were given by the State.

In its final report the committee recommended that the assistance should take 'the form of a loan secured as a first charge upon the land developed as a garden city.' As has been explained, effect was given to the committee's recommendations in the Housing Act, 1921, which provided for loans for the development of garden cities. But the granting of such loans, under the terms laid down by the Treasury, was, as we saw when relating the history of Welwyn, not sufficient; for they were inadequate in amount when most needed, the half-yearly payment of interest and amortization of principal, which fell as a first charge on the undertaking, constituted a heavy burden, and the restrictive control that accompanied the loans was paralysing. It was from this burden of capital charges in the initial stages that the undertakings most needed deliverance (to say nothing of the dead hand of control), but no such assistance was provided, neither had it been recommended.

Another point was that, although the early revenues were small, the Public Works Loan Board expected the half-yearly payments of interest and principal to come out of them, and regarded with extreme and undisguised displeasure the fact that it could not be done. To be of real assistance the loans should have been equal to the total amount of the approved expenditure, and the payment of interest and repayment of the loan

should have been postponed for a time or met in some other way than out of revenue. With a view to overcoming this difficulty, the proposal was made in the first edition of this book that the Treasury should guarantee the principal and interest upon approved expenditure, as an alternative to finding the money out of the Local Loans Fund, the garden city enterprise itself being made responsible for raising the money, which would have presented no serious difficulty on a State guarantee. Had interest been payable under the guarantee that interest could have been repayable by the garden city company out of capital or alternatively could have been allowed as a debt payable out of future revenues. It was further proposed that garden city companies should have the power to pay interest on shares out of capital, and that the provisions of the Companies Act should be extended to cover it. The Reith committee, dealing with this question of interest on advances before revenues are sufficient to meet it, recommended the deferment of interest on loans without limit on Government-sponsored schemes, but was able to make no such recommendation on schemes undertaken by authorized associations, which perhaps was made the justification for the Government's decision not to use such associations as a means of building new towns.

### § 3

In Howard's original scheme he proposed that the garden city should be financed by means of debentures at a low rate of interest. He maintained that such debentures would be well secured; but he overlooked the fact that while that would be true when the town had been fully developed, and the revenues had been created, debentures would not be well secured during the period of development. This was the chief defect in Howard's financial proposals; and its bearing was not sufficiently perceived by the original promoters of Letchworth, who were wholly in favour of the undertaking being carried out on a voluntary basis and without State assistance.

It does not seem necessary to argue at any length that the establishment of new centres of population and industry is a proper use to which to devote State credit. More than twenty years ago, under the Trade Facilities Act, 1924, national credit was made available for the building of factories and the extension of railway enterprises in this country and for industrial activities abroad, and the Treasury was empowered to pay an amount not exceeding three-quarters of the interest payable in the first five years of the currency of a loan raised by or on behalf of any public utility undertaking in any part of the British Dominions, provided that the loan was raised and expended in Great Britain. That financial assistance was considered to be right because 'it is to be granted to perfectly sound public utility projects which were being held up for the time being for financial reasons, but which would be carried out at once if some financial help were given in the shape of payment of part of the interest on the money required' (*The Times* Financial Correspondent, 9th September 1924). For new towns at home, however, there was no such support. The garden cities were praised for their valuable pioneering work, and for their contribution to housing, but they got no assistance. The State

spent enormous sums of capital and took upon itself large annual burdens in the form of subsidies for the building of workmen's houses; but on the choice of the right sites for these houses practically nothing was spent, yet on the choice of sites the ultimate national value of this expenditure largely depended. Had capital for garden city enterprises been guaranteed by the State, national credit would have been devoted to national development, and to the creation of wealth by the establishment of new centres of production; and by its means expenditure of both public and private moneys upon building would have been better secured from the narrowest financial point of view.

#### § 4

The new towns to be built under the New Towns Act, 1946, will be relieved of the financial difficulties that were faced by the two garden cities. The Reith committee had finally recommended that the method of providing advances through the Public Works Loan Board (which it at first somewhat strangely proposed) was not satisfactory and that the necessary funds should be provided by the Exchequer. Its specific proposals were:

- (1) That all finance be found by the State by way of loan;
- (2) that there should be no payment of interest until the town is sufficiently self-supporting to meet it;
- (3) that when this time comes, interest on the outstanding loan should be paid from the dates of the advances;
- (4) that when there is a surplus available over and above the amount required for interest, provision for amortization should be made.

Under the New Towns Act, the expenditure required by a development corporation and properly chargeable to capital account is to be provided by the Treasury through the minister, and, as a development corporation is precluded from raising capital on its own account, all the money required will have to be found in that way. Moreover, the minister is empowered to make grants to the development corporations out of moneys provided by Parliament for other expenditure, so that interest can be met by grants. All of these financial provisions are subject to the limitation 'the Treasury may' and 'on such terms as may be approved by the Treasury,' which gives the Treasury the final word; but as the new towns will be the entire responsibility of Government, and under the direct authority of the minister, they will, we can suppose, have adequate financial support, though Treasury control is a fearsome thing.

In practice what will happen is that the initial capital costs of the land and the expenses of the development corporation will be met, and that the development corporation will prepare plans and schemes of development for the town to be carried out over a stated period, which, when approved by the minister, and afterwards by the Treasury, will, subject to any modifications required, be duly financed. There can be no immediate question of meeting charges for interest and repayment out of revenues. The development corporation is required to keep proper accounts, to be audited by an auditor



appointed by the minister, and to submit the audited accounts to the minister for each financial year. The development corporation is also required to submit a report to the minister at the end of each financial year, which report is to be laid before Parliament. The questions of interest and repaying advances will arise later.

### § 5

The creation of a new town of fifty or sixty thousand population will need a large sum of money. It is estimated that an average of three to four million pounds a year is to be expended for each town over a ten-year period, the peak period being the fifth year, when an expenditure of seven millions is to be anticipated. This may be compared with a total annual expenditure of £100,000 to hardly more than £200,000 on Welwyn Garden City in its early stages. For capital expenditure, not including grants, the Act provides for an initial sum not exceeding fifty million pounds for all the new towns, which is a considerable understatement of what is required.

The expenditure involved in the building of a new town may briefly be indicated by setting out the various stages of development:

(I) *Initial expenditure in the first year:*

- (a) Purchase price of the land, including buildings, timber, etc.
- (b) Costs of conveyance, including investigations of title and other legal charges, etc.
- (c) Redemption of land tax, tithe, and other charges upon the land.
- (d) Surveyors' and other professional charges in connection with the purchase.
- (e) Compensation to tenants and owners for disturbance.

(II) *Development (preliminary) in the first year:*

- (a) Overhead expenditure for directive, administrative, and technical staffs.
- (b) Surveys for water and drainage, including contour survey and preparation of schemes of development.
- (c) Preliminary town-plan and selection of areas for residences, industry, commerce, agriculture, etc.
- (d) Arrangements for water, gas, and electricity supplies.
- (e) Arrangements for railway facilities and other transport.
- (f) Survey for building and road material, gravel, sand, brick earth, etc.

(III) *Development programme for the second and succeeding years until the town is completed in ten years or more:*

- (a) Overhead expenditure for directive, administrative, and technical staff will continue.
- (b) Detailed town-planning and lay-out of areas for land use.
- (c) Construction of roads.
- (d) Provision of water, drainage, gas, and electricity supplies in accordance with schemes adopted.
- (e) Construction of works incidental to railway and other means of transport.
- (f) Establishment of building and maintenance organization.
- (g) Disposal of land.
- (h) House building and neighbourhood centres.
- (j) Factory building and development.
- (k) Hotels, hostels, restaurants, halls, and other central buildings.
- (l) Building of shops, offices, and workshops.
- (m) Establishment of nurseries, gravel works, and other ancillary enterprises.
- (n) Advertising and public information.
- (o) Welfare.

Nothing is to be gained by attempting to forecast the expenditure year by year as the details will vary from scheme to scheme. The above outline does not include expenditure on schools, railways, and other transport to be provided by the bodies responsible for them, or on gas and electricity supplies provided by the respective authorities, and water may probably be found by an existing authority, though that is not so certain. Interest on borrowed money has to be included, too, of course.

## § 6

The financial success of land development depends in the normal way largely upon the market that is created for the land. In a new town the site is purchased at agricultural value, it is planned, and roads, sewers, and public services, etc., provided. There is no existing population to make a market value in excess of that of agricultural land, so that people must be attracted to the town and persuaded of the new urban values. We have already touched upon this matter, but it seems desirable to discuss it a little further.

Under normal conditions, there is no definite relation between the cost of development and the price of building land. Price has this relation to cost, that unless the price covers cost, production will cease. The present cost of production is high; to maintain production prices must therefore increase; they have not, however, increased in proportion to the increased cost, because until recently there was much land developed before the war in the market. The supply of that land is limited, however, the demand for new buildings is great, and the prices of building land will be affected by the new level of costs. There has been little new land development except for housing schemes, but the new costs appear to be at least one and a half times as much as before the war. Irrespective of costs, the price of land is determined by supply and demand, and depends upon the advantages of the land offered compared with other land. If land is well situated it will fetch a higher price than if it is badly situated; if two pieces of land are equally well situated they will, theoretically, though not always in practice, fetch the same price, although the cost of development of one piece may have been high and the other low. The profit upon the land that has been developed at the lower price will be the greater, and the value of the land before development will usually have been higher. If, after land has been developed, it does not offer such amenities and advantages as will fetch a price in the open market sufficient to cover its original value, plus the cost of development, money will be lost.

The cost of development has this bearing on the matter, that it is advisable to ascertain what that cost is likely to be, and then to judge whether the developed land will offer such advantages in comparison with other land as will cause it to command a market value that will repay the original cost of the land, plus cost of development, plus a margin. For that purpose a system of development costs is an imperative necessity. It should be kept in the same way as manufacturers' costs and started at an early stage, although the

analysis of expenditure adopted in the first year or two may afterwards need revision. The chapters dealing with Letchworth and Welwyn finances should be consulted in this connection. Owing to the divorce between the actual and economic rents of working-class houses, developed land has little or no economic value for the purpose of cottage building. As regards land for shops, factories, and better-class residences, developed land has an economic price.

At the same time it must be borne in mind that the process by which land values are arrived at is not easily detected. Everything depends on the position of the land in relation to demand, that is to say to the need for it. Two pieces of land may have cost the same amount, but their ultimate values may be entirely different. For the truth is that land development is fundamentally an art, requiring science as does all art, but its practice is that of an art, calling for feeling, imagination, and above all powers of construction. What is called public opinion has, too, a great deal to do with values.

The final market price of developed land will be that of equally advantageous land available for the particular purposes for which the buyers require it. Generally speaking, the market value will be influenced by the intensity of the demand for land in the neighbourhood of the city to which the satellite town geographically and economically belongs. The most useful general remark that may be offered is that the advantages of the satellite town should be such that the market value of its developed land should be above the average for other land at the same distance from the parent city.

The cost of development in the new town should be lower than the normal cost of development, owing to the existence of the plan and the organization of the work. But the cost of the creation of what has to be called the market for the land may be a considerable item.

At the start it is generally highly inadvisable to ask too high a price. It is better to test the market gradually as it comes into operation and to endeavour to encourage demand by attracting people at a reasonably low price, and then, as the town grows in size and the demand increases and the market enlarges, to raise prices, but not so high that the demand is satisfied, but always keeping the price low enough to maintain a fairly strong demand. After the first unit of developed land has been disposed of, a bolder policy may be adopted than would be wise at first. Until a town has been established the demand has to be stimulated by advertising and other methods, not the least effective of which will be the offer of land at attractive prices, irrespective of the cost of development. It should be remembered that there is no real comparative basis for testing the values of land.

Speed in development is of the first importance to create revenue to help to meet the charges for public services, and to enable the undertaking to benefit from revenues derivable from the presence of the community with its social and commercial activities. Speed in development normally reduces the cost of development, and, with all its attendant risks, is to be regarded as the factor of highest economic importance.

Land values are created chiefly by the growth of population, and are contributed to



by public and private enterprise. There is no doubt that the manner in which development is carried out has a marked effect upon them. In England generally land values are much below what they are abroad, particularly in America. One explanation of this is that far less is done in this country to develop land values than is attempted in America. The scientific study of this subject hardly exists.

### § 7

The preceding paragraphs repeat substantially what was said in the first edition of this book, because they relate to the production of land for the market. They are repeated for the sake of making clear the new situation that has been created by Government action in special legislation for the new towns and in general legislation upon town and country planning. In the new towns, built under the authority of the Government, building land will not be produced for the market, and market considerations, including the incidence of costs, will not arise in the same way. Neither, in fact, will land values in the sense of market values be created. The procedure will be artificial, that is to say, the results will be planned and consciously produced. A market is a natural phenomenon. It exists when individuals transact business subject to at least some elements of freedom of contract. It cannot exist when society, through its own organs, enters production, decides what is to be done, and organizes the work. Costs have an entirely different meaning in a socially organized economic process from what they have in private enterprise. For that reason the finance of the new towns will be of a different kind from that of the two garden cities, and nothing that has been said hitherto upon the 'finances' of satellite towns in the strict sense of the term will apply to them. To the extent that money is advanced for the building of these towns on a loan basis, with provision for interest and repayment, some essential elements of capitalistic economy will continue; but the towns will still not depend either for their speed of development or upon the kind of development that takes place in them upon their merits, or upon the appeal they make in competition with other towns, but upon the attempts made to direct industry and housing to them. They will grow not as nature or the unconscious processes of society cause them to grow, but in accordance with Government policy, and the energy and ability with which the Government causes them to be conducted. Neither financial values nor land values will be created; but values that belong to a different category, to handle which will require very great skill.

### § 8

The writer is not putting forward this view of the position of the new towns as criticism, but as a statement of fact, the full implications of which should be realized. What it means is that while the financial processes and the ascertained results will have some likeness to those of business enterprises they will in fact have only a superficial and casual correspondence with them, and require to be judged according to entirely different

standards. What those standards should be for the true measurement of these enterprises is a problem that has still to be explored.

In this connection something is to be learned from the Tennessee Valley Authority in America. That great enterprise was financed wholly by the United States Treasury by appropriations made by Congress on which no interest was payable, and it has been authorized to retain its revenues. If the new towns were financed in the same way, they would make a contribution to the reconstruction of this country without a parallel in history. Indeed, they would create history. They would provide the basis of housing and reconstruction free from subsidies, and lay the foundations of a new order. If the money required for the new towns were provided without interest charges, the entire building development given a use-life of say thirty years, it would be possible to keep the towns in the highest state of efficiency by the examination of all buildings at the end of the first thirty years, and thereafter every ten, or twenty, or thirty years, allowing for the demolition or reconstruction of unsatisfactory or inadequate buildings, thus enabling obsolescence to be dealt with, so that no out-of-date buildings would remain. This, no doubt, is fantasy, and the writer does not pretend it to be anything else, but it is, none the less, not far removed from the truth of the situation in which this country is placed. The hard, crystallized, immovable core of city life from which arises the decay of human values is that which is represented by the congestion of money values in what are called land values. The paralysis of the brains and energies of the people, and the great drag upon production, is that which is produced by the accumulation of debt frozen in land. If it were possible to get rid of debt and interest, the life of cities would become free, mobile, and capable of transformation. This would be possible in the new towns; and in this opportunity perhaps lies one of the secrets of human freedom.

## § 9

The remarks made earlier upon speed of development apply to the land available for residential and industrial purposes, not to commercial sites. It would be a mistake to dispose of commercial sites too quickly, and it would be a heavy loss to dispose of them at too low a price. Trading concessions are to be carefully dealt with, for that is where communities can rapidly and finally lose the benefit of what used to be called the unearned increment. Great skill is undoubtedly required to ascertain that increment and to direct it where it belongs. The growing community must be served by shops, but the increment should not be sacrificed for the sake of immediate results. Too much of what successful shopkeepers call their profits is nothing but this increment. This question is discussed to some extent in the Welwyn Garden City part of this book. The methods adopted at Welwyn are not practicable everywhere, and other ways of reaching the same result may no doubt be found. The erection of shop premises by a new town corporation to be let on renewable leases would be one method. There is much to be said in its favour, provided any kind of bureaucratic interference with

business activity could be eliminated. The new town should provide a framework within which private agencies could make their maximum contribution. Whatever method be adopted, the end to be aimed at is the preservation for the community of the values created by trading opportunities. A point to be borne in mind is that goodwills are bound to be limited. This will be no social disadvantage; for no more scandalous exploitation of the public interest than is contained in the financial manipulation of shop goodwills exists anywhere. In addition to shops, there are licensed premises, garages, cinemas, and so forth. Concessions for all these have considerable and rapidly increasing value and should not be too readily disposed of.

Indeed, it cannot too clearly be stated that the great danger to which the development corporations will be subjected will be that of allowing the values created by their enterprise to escape into the possession of those who will set out to acquire them; great foresight and real grasp of the economic factors involved will be needed to avert this danger, in which conventional points of view will be of little assistance.

### § 10

Certain public services must be charged for on the basis of the measurement of the service rendered by the responsible agency, for example, gas and electricity. Other services may be dealt with in one of two ways, or by a mixture of both. They may be covered by the rent, or provision may be made for a separate annual charge in the form of rates. The charges for certain public services, as for example sewage disposal, street lighting, public parks and gardens, could be included in rent. Other services, such as streets, paving, etc., normally charged direct in the form of a capital sum based on frontage or on area, will not be likely to form the basis of a charge in the new towns.

The relative merits of the different methods of charging for services deserve a certain amount of attention. The crowding of charges for public services into rent may have an undesirable psychological effect, even if financially sound. It may not be realized what the rent covers more than the land itself and consequently the new town may get the reputation of being a place in which high rents for land prevail. If the occupier pays separately for certain specified services, he realizes what he is getting and why he has to make a payment. Moreover, the fixing of a charge for public services, and particularly the commuting of such fixed charges, gives an undesirable lack of elasticity. If the cost of the services increases, there is no means of increasing the annual charge. Other things being equal, it is probably advantageous to make a fixed charge—annual or commuted—only in respect of certain services which are immutable, as for example, the first cost of streets, roads, public parks, etc., and to leave the cost of upkeep of such services and other variable items, such as lighting, etc., to be charged in the form of a rate, or some other form of contribution to be fixed from time to time according to the expenditure.



A new town development corporation will have no statutory power to levy a rate, but it could provide for payment in its agreements. For instance, a water rate could be levied on the basis of a contract between the corporation and the users of water. At the same time it is advisable to avoid creating the impression that a tenant may be called upon to pay any rate that the corporation may see fit to impose in the future. The corporation should define exactly what category of charges the tenant may have to pay from time to time. The tenant has a right to expect security of tenure and dependence upon what may be reasonably demanded of him.

An important element in the use of land is the amount of the local rates. New towns started in agricultural districts will be subject in the first instance to the rates of rural districts, or small urban districts, which are much lower than town rates; and the increased ratable value produced by the town will tend, at the start, to reduce the amount of the local rate. The low rates, are, however, not likely to continue, because the costs of education and local public services will quickly increase; but the rates should remain lower than the average.

A difference in the annual rate of every shilling in the pound is equivalent to an advantage of 3.46 pence per week upon a house rated at £15: at twelve houses to the acre the advantage is £9 per acre per annum, which at eighteen years' purchase is £162 per acre in capital value. It should be noted that assessments for rating purposes have been usually lower outside the great towns than in them. Low rates, combined with low assessments, provided public services are reasonable, give a greater economic advantage to the localities where they exist than is generally realized.

The effect of garden city finance upon local rating is a matter that is worthy of a good deal of study. In Ebenezer Howard's original scheme the rate-rent paid by the inhabitants was intended to cover local taxation. It is not practicable, however, for reasons already given, to establish a ground-rent sufficient to cover local rates, because the future liabilities under that head are uncertain. Of the local rates, the county rate contribution is practically outside the control of the new town area (this contribution, which covers education, maternity and child welfare, health services, public assistance, town-planning, highways, police, and other services, is something like two-thirds of the total rate), and the district rate, even to the extent that it is under the control of the area, is in the hands of the council appointed by the inhabitants, not of the development corporation. Therefore if the ground-rents paid in the new town were to cover rates, the corporation would be making itself responsible for liabilities it would have no power to control. The corporation can do nothing else but allow the inhabitants to be subject to the rates made to meet local county and municipal expenditure in the usual way. There is, however, one direction in which new town development has a bearing upon the amount of rates paid. A development corporation does a certain amount of work that would normally fall upon a local authority, the cost of which would have to be met out of the rates, such as preparing and administering the town-plan, supervising the erection of buildings and approving plans for building, the

preparation and carrying out of the main drainage schemes for foul and surface water and the sewage disposal works. The mere existence of the scheme and the single ownership of the land that comes from it effects economies. All of this means that the rates, which would otherwise be high until the town was established, are kept low and are affected mainly by such expenditure as education, lighting, refuse disposal, and so forth. The staff of the local authority and its administrative expenses are not greatly affected.

### § 11

At Letchworth, and in the original Welwyn Garden City scheme, the inhabitants of the town had an interest in the surplus profits of the garden city company. This sharing of the community in the benefits of the enterprise was indeed an inherent element in Howard's scheme. Development was, however, so slow that no surplus profits arose at Letchworth, and at Welwyn Garden City the new development corporation will reap them. These profits were intended to be used for the well-being of the town in the provision of amenities, the improvement of parks, playgrounds, and recreation generally, entertainment, educational facilities, and many other public purposes, the effect of which would be not only to make the town a more desirable place in which to live but a means of reducing the rates. That this was not mere fantasy there is every reason to believe when we consider the revenues derived from communities in the form of ground-rents and profits of many other kinds, all of which under normal conditions go entirely into the pockets of private persons or corporations.

In the new towns, as the finance will be on a different basis from that of the garden cities, the question of the disposal of surpluses will take a different form. Surpluses will exist and no doubt it is the intention that they should go to the Exchequer. This, however, is a matter that ought to receive further consideration. Certainly the new towns should make their contributions to the expenses of government, to defence, law, and so forth, but is it right that the Treasury should seize upon the 'profits' of these communities beyond what should be the town's proper share of national expenditure? The new town communities should surely have any such balance of profits placed at their own disposal. The subject is of much interest from a theoretical as well as a practical point of view; it is likely to become an issue at no distant date. If the new towns are substantially completed within, say, ten years, they will very quickly prove their revenue possibilities. It is an inescapable element in Howard's doctrine of the garden city that the local community should have the 'profits' arising from its existence and activities, and the value to communities in its influence upon local government of this tangible result of common action can hardly be exaggerated.

### § 12

A factor of financial importance in new development under present conditions is the rate subsidy in connection with the housing of people from the congested cities, and the

costs of re-allocating industry. When a local authority takes a site outside its area for housing purposes, it receives the Government's subsidy upon the cost of the scheme and makes a rate charge upon its own area as required under the Housing Acts. It also, of course, builds the houses, selects the tenants, and manages the property. In the new towns, local authorities may acquire sites, carry out schemes, and manage them in the usual manner. The subject has been referred to in earlier chapters. The point made here is that no part of the deficiency arising on these schemes can properly be made to fall upon the new town.

Dwellings will immediately have to be provided by the development corporation for its own staff, and for the employees in its building and constructional work, and there will be demands for houses independently. Much of this building will, under present conditions, be required to be subsidized. The rate subsidy cannot be found by the local authority in whose jurisdiction the new town lies, so that an equivalent amount will have to be found by the development corporation and met out of grants made by the minister. There is no other way.

The argument put forward here is that the new towns should have the full advantage of the subsidies available elsewhere to housing in less favourable economic situations, for unless that is done they will be severely hampered in their vital early stages. The ill effects of refusing the full support of the subsidies are to be seen at Welwyn Garden City, for this was the main reason for its slow early growth. After the new towns emerge from their beginnings and become established the position will entirely change and the town's new economic basis will appear. To support the new towns with subsidies to the fullest extent will be financial wisdom, for they alone of all the housing schemes in the country will ultimately be in a position to repay those subsidies.

The costs involved in the decentralization of industry to the new towns will have to be met in a like manner. Facilities similar to those that exist in trading estates in the development areas will have to be provided by the development corporations. They will thus be able to offer to assist industrialists with buildings, utility services, and financial assistance in the removal and re-equipment of factories. This will often be necessary, and it should be done on a generous scale; for in any event a heavy cost will have to be met by every transferred industry, though no doubt to its ultimate advantage.

### § 13

The fact that the development corporations will acquire the land on which the towns are built on the basis of present use value, the difference being charged on the Land Fund, will mean that they will acquire it at a low price, which will give them a financial benefit that will be of great preliminary assistance. This will be at the expense of the owners or of the Land Fund or both. The matter was referred to when discussing the acquisition of Welwyn Garden City. It is not a fact to be overlooked. Also the new town corporations will not be liable for the payment of development charges; but they may be required to pay sums in lieu thereof to the Central Land Board.



## § 14

The most important factor in the finance of the new towns is, as we have said, their subjection to Treasury control. Large sums of public money will be involved and supervision is undoubtedly necessary, but unless exercised intelligently and lightly it will not be likely to prevent extravagance but to have a discouraging effect upon enterprise. The development of a town is an undertaking calling for the most lively energy, for not only has every kind of resistance to be overcome, but the operation itself is of a positive kind; but judging from the kind of appointments to the development corporations and of the chief members of their staffs, for which the ministry is responsible, their functions are being looked upon as mainly administrative, which to the present writer seems to be a complete misunderstanding. Little or no thought seems to be given to the creative and productive elements in their direction and management, and to the need for the characteristic qualities of the *entrepreneur*. This misunderstanding may be fatal to success. In this chapter we are concerned with finance: it may be fatal to financial success.

Unless the Treasury and the ministry allow the corporations freedom of action they cannot succeed, for they are engaged in building up a new thing, they have to conceive their enterprise as within the sphere of trading, and they will depend upon active-mindedness and considerable elements of risk-taking. Civil service and local authority mentalities and methods will be entirely out of place.

One aspect of this matter is the mere cost of staffing the corporations. Already there are signs that although the salary standard is low, the total cost of the staffs may be five or six times what was required at Welwyn Garden City at the height of its development. The members of the development corporations themselves will receive much more than the directors of the garden city companies ever took for their services, for the latter regarded themselves as engaged in a public-spirited enterprise; there need, however, be no quarrel with that aspect of the matter, for the work ought to be paid for. The staffs, however, will be much larger than the garden city company found necessary. At the end of the seventh year of the Welwyn Garden City Company's existence the secretarial, financial, architectural, engineering, surveying staffs, including also the chairman and finance directors, who gave their full time, was about twenty-five, and the total salaries under £10,000 a year. Prior to the war the staff was not quite fifty, and the total salaries were approximately £15,000. Of course, one must expect the development corporations as public bodies to have the staff to deal with the public and to provide for their own safety, a major interest being their own self-protection. Too rigid Treasury and ministerial control will inevitably send up costs on this ground alone. The subject will not be pursued further here, but it is obvious that there is much more that could be said upon it.

## CHAPTER VIII

### CONCLUSION

But who can tell of the fullness and pleasure of life, who can number all our new cities—cities made by the loving hands of men for living men, cities men weep to enter, so fair they are, so gracious and so kind. . . .

H. G. WELLS, *In the Days of the Comet*

#### § 1

To deal adequately with the subject we have had before us would mean a series of treatises rather than a single book, and in bringing this work to a close the writer is aware that the final chapters, in which the building of new towns by government agencies is dealt with, contain no more than the headings of the parts of the subject. The Ministry of Town and Country Planning, and the development corporations responsible for the new towns, have not merely the duty to study and investigate the great and vital problems that are involved, they have the task of executing one of the greatest social enterprises ever embarked upon in this or any other country. What they do will be watched as an undertaking of the greatest sociological importance. The subject does not lend itself to dogmatism. Coming within the sphere of sociology, a science the scope and methods of which are still undecided, dogmatism on the principles of town building is especially inappropriate.

Part of the object in the writing of this book has been to show that the problems the builders of the new towns have to face have already been experienced in a practical form over the past forty years at Letchworth and Welwyn, and that what has been learned at the two pioneer towns should provide guidance for the new towns. There is no need to proceed, therefore, as though the process of the inception and growth of a town were unknown. If the two garden cities are studied, those responsible for the new towns will find sufficient material in the experience of planning and building, direction and management, industry and commerce, and local government to enable them to proceed with confidence and to avoid at least the elementary mistakes.

To establish a new community is a complex and difficult task that should be regarded as demanding as much wisdom as the bringing up of a child. Young communities lack strength, yet they are wilful and heedless, at the same time they possess energy, enterprise, an adventurous spirit, and latent possibilities that are not easy to measure but should be allowed expression. A pattern will to some extent be imposed upon them through the plan on which they are built, but it is not to be forgotten that the most valuable element in each of the new communities will be its own vitality and communal energy, and that great social injury will be done if anything is allowed to stand in their way. Let the builders of the new towns read what is told here of the experience at Letchworth, forty years ago. The new towns will generate their own life, which may be different from what was expected, and they should be allowed to follow their own way

within the design of the scheme. This will demand much understanding and tolerant wisdom in the development corporations and their officers. They should realize that town-building is not, as we keep on repeating, a mere technical operation, and their natural preoccupation with the technical problems of the construction of the town must not cause them to forget for a single instant the human problems that are present, in relation to which all technical problems are secondary and all technical solutions instrumental. A new town is not simply an exercise in town-planning, with architectural engineering and constructional works to be carried out, it is the creation of a living community. The form and spirit of the community, its vital character and creativeness, the happiness of people in their homes, at their work, and in their social interrelations provide the only valid test of success.

## § 2

The argument maintained in this book has been that the extension of cities should take the form of new, planned, industrial and residential satellite towns of limited extent, keeping the land between the cities and the new towns for agriculture, an argument that has been accepted by Parliament at least in principle by the passing of the New Towns Act, 1946. At the moment of writing, it is understood that as a beginning the Government contemplates a programme of twenty new towns. This marks a new development in our national life. It means that the great cities can start to reconstruct and modernize themselves, the pressure of population and industry being relieved by the new towns, and that the one-time fatalistic spirit to which they were subjected should disappear. The country towns will also be enabled to extend without spoliation of their surroundings, and to them should come new life. We are thus at the opening of a new era of urban life, in which, if the work is done intelligently, this country will lead the world, for nothing equivalent to it is being attempted elsewhere.

## § 3

The new towns will provide a new environment. The character of each community will depend upon the structure of the town and the facilities it offers, particularly upon the homes of the people, and how they are placed in the town, upon the industries and how the people work together, and how they govern their affairs. Not one of these elements is simple, and each has problems of its own. In industry, for instance, there is the work itself, the attitude of the worker to the work and to the product, and the extent to which the whole man is involved in his work. These industrial questions are not to be left out of the sociological subject matter, for they are of first-rate importance. Included within them are trade union organization, wages, and leisure. The town provides their environment.

There is next the matter of civics, the social life of the town, education, health, the arts, clubs, entertainment, and sport, and the specific function of local government. For these, too, the town provides the environment. Finally, there is the family in which



man, woman, and child have their setting. The family depends upon the home, upon religion, and upon the sense of unity in the community. For the family also, the town provides the environment.

It is true that man does not live by physical conditions alone, but the environment enters into the life of every individual. That is why the town is so important. Even its appearance is important; for that the town should look to be the possession of a community that has pride in itself, that has dignity, that values space, that secures for itself adequate buildings in which its social activities are housed, is essential for healthy communal life.

This, then, is how the community is built. The citizen has relations with his neighbours, the people among whom he lives, he has relations with his fellow workers, and he has contacts with those with whom he is associated in the churches, schools, clubs, and other societies to which he belongs. In this we distinguish what Patrick Geddes called the three factors of place, work, and folk. Through them the community is brought into being, is sustained, develops, makes its contribution to individual life, and displays its character. The task of those who are responsible for the new towns is to recognize these factors and to cultivate them. They cannot impose them, for they are there whatever happens, and the best they can do is to provide the environment for them and the facilities they need: the good houses, the well-designed neighbourhood, the means of distribution, the places of work, the schools and cultural buildings, the playing fields, the equipment of the town in the most complete sense, and the possibility of unity. The people themselves will have to make their own contribution and create the social unity. Unless they co-operate with each other there will be no town in the real sense. And it is true that how to live together is an art in which there is still, and always will be, much to be learnt.

We are conscious to-day in this country of being a people besieged; but that in truth is the normal condition in which human life is lived in the world. That we had forgotten it in the enjoyment of our comforts and in negligence of mind shows how far we had drifted from reality. Men and women to-day have heavy tasks in the perfection of their lives, and they need an environment that will enable them to discharge them. To provide that environment is the function of the new towns and of the regeneration of cities that the new towns will help to make possible. How is the life of men in cities likely to fare in the critical circumstances of the coming years? The question is not easy to answer. Certainly the physical conditions must be changed. The new towns should be regarded as showing the way to that change. Although less than one in fifty of our people may live in them, they should be the means throughout the nation of increasing confidence, adventure, and faith in the people as a whole.

#### § 4

The major parts of this book have been concerned with the pioneer garden cities, and there remains to be considered their relation to the new towns policy. The question

would have arisen anyhow, sooner or later, but it so happens that the question is immediate, because the first of the new towns was planted between them, and the minister decided, as we have already related, to take the completion of Welwyn Garden City out of the hands of the company and to create a development corporation. The Stevenage site is about three miles to the south of the Letchworth estate and a little over five miles to the north of Welwyn Garden City. Such proximity meant that the future of the garden cities was involved; they are on the same railway and on the same main highways, and serve the same population, and the new development could not take place without affecting them. Stevenage will be built with all the resources of the State, and will no doubt receive priority in available labour and materials. Compared with the Government town, the garden cities as they stood would be handicapped. They had already, in 1947, been advised by the minister that they were not to be allowed to be developed to the size to which they were projected to be built. Letchworth, designed for a population of 35,000, was reduced to 32,000. Welwyn Garden City, intended since 1920, with additional land to be acquired, to be a town of 50,000, was reduced to 36,500. The protests of the garden city companies and of the two urban district councils were ignored. There was no obvious reason for reducing the populations of these towns when Stevenage was to be allowed to be as large as 60,000. Indeed, there are arguments based on geography and transport for a much smaller town at Stevenage and for both Letchworth and Welwyn to be increased even beyond the size originally proposed for them. The action of the minister indicated that the scales had been intended to be weighted against the garden cities, and that the difficulties they have had to suffer by virtue of being private enterprises were not to be lessened now that the State, learning by their example, has assumed the responsibility of imitating it.

## § 5

That the two garden cities should be put in an inferior position to its own new towns by Government action would be a poor acknowledgment of pioneering and experimental work from which so much of public advantage has been gained. It was easy to understand that the Government did not want to increase its responsibilities by offering facilities for new towns to be started by associations apart from its own directly controlled schemes, but the two pioneering undertakings, organized to bring their schemes to completion, ought to have been given the means to do so. They could then have been fully developed and made to show their merits in a finished state before Stevenage had got ahead. As it was, Stevenage might have been completed as a town of 60,000 while Letchworth and Welwyn languished. This would have been grossly unfair, and indeed would have been unnecessary. The Government should now make available to Letchworth the facilities of finance and priority that are to be granted to Stevenage.

The minister has as yet done nothing with Letchworth, but in deciding to replace the Welwyn Garden City Company by a development corporation he brought that enterprise on to the same level as the other new towns. It will not be quite the same level, of

course, because Welwyn was already a new town, but its completion will be subject to the same facilities, financial provisions, and, we must add, inhibitions and directions, as the other new town corporations. The position of Welwyn has been discussed in the third part of this book. Nothing can usefully be added at the present stage except to say that the early completion of the garden cities would provide a standard of achievement that should aid the governors of the new towns, and should also enable the public to see new towns in being. At present their architectural and planning merits and the full value of their pioneering achievements are not realized because of their uncompleted state, and it would be to the credit of the owners of the towns for their work to be brought to its proper end. This could still be accomplished with comparative ease, and being done, would provide valuable object-lessons for the further development of the new towns policy. In their incomplete state, even intelligent members of the public cannot always see them in their true aspects, as we can tell from references to garden cities that from time to time appear in books. Even intelligent writers need to be taught what a new town is, and the means of education would be provided if instead of depending upon their imagination when visiting Letchworth or Welwyn the town was there to be seen. Of course, there would be much to criticize even in the completed schemes; but it would be possible for lovers of both nature and art to realize what possibilities of a new urban environment are contained in them, and are likely to exist in other new towns.

### § 6

Reference has been made to the recommendation of the Reith committee that a central advisory commission for new towns should be established by the minister, and the subject deserves final mention. In its interim report the committee said that the functions of the commission should be:

- (1) To provide a central pool of information and experience.
- (2) To advise the appropriate minister on any points referred by him, or on its own initiative to offer advice.
- (3) To deal with matters referred to it by the several agencies and generally to advise the agencies.
- (4) To receive an annual report from each agency dealing with its work to date, to make such suggestions and representations to the agency concerned as the commission may think fit, and to report thereon to the appropriate minister.
- (5) To advise, where necessary, on the allocation of labour and materials among the several agencies.
- (6) In order to secure uniformity of practice, to advise on the scale of salaries paid by agencies and on methods of appointment of personnel.

This recommendation was repeated with emphasis in the final report, when the committee went on to say:

In a great enterprise of this kind, in which the public interest will be deeply engaged, there will be much that is experimental in character. There will be choices between short-range and long-range policies; between what is expedient at the moment and what is wiser in the long run. There will be public criticism from various quarters, not always disinterested. For an undertaking in which



ideas on the one hand and the attitudes and reactions of people on the other must play a conspicuous part it seems to us essential that there should be some suitable body to which the various corporations can have recourse for detached and well-founded advice and guidance, based on experience. There are two main reasons. Firstly, advice and guidance of the kind we have in mind cannot without prejudice be associated with the implicit authority of a Government department or of a commission with executive powers. The pressure towards centralization and uniformity which follows inevitably when departmental authority intervenes would run counter to the policy of leaving the fullest freedom to the corporations in ideas and execution. An advisory commission on the other hand would not suffer from this inherent disadvantage. Indeed it would tend to favour variety and freedom of experiment. Secondly, the advisory body will fortify the position of the ministers when under sectional pressure in a way which departmental officials cannot in the nature of things provide. If, therefore, it is the intention, as we have recommended, that the corporation, while subject to ministerial direction in major policy, should otherwise have freedom of executive action, a body such as we suggest seems to us an essential part of the general organization.

The argument is well presented, and there can be no doubt that the recommendation was a wise one. Unless it is acted upon, the minister himself, through the officers of his department, will have to fulfil the functions of such a commission, which means that from their inception the new towns will be subject to civil service control, which will be bound to affect them adversely. From such a danger the new towns should be freed, and the only practical way of freedom would be for a commission, such as the committee proposes, to be set up. There is, however, no provision for such a commission in the Act, and new legislation would possibly be required to enable the salaries and expenses of its members to be paid, unless such payment could be regarded as coming under section 24 (c).

The committee recommended that the commission should consist of a chairman and four or five other members. Appointment to it, it is suggested, should be by the minister, for a term of three years, 'with reappointment as a usual but not invariable course.' The members should be paid and should be expected 'to give one or two days weekly to the commission's work, visiting the different corporations.' In the present writer's opinion the commissioners should devote the whole or a major part of their time to the work, the chairman certainly being appointed on a full-time basis. In the first edition of this book, the writer proposed the formation of a Garden Cities Commission with objects that went further than those proposed by the Reith committee. The proposal is reprinted at the end of the present work. When the book was first written there was not then in existence a Ministry of Town and Country Planning, and some of the duties proposed for the commission are now properly exercised by the ministry. The functions of the proposed commission for the new towns should, however, be extended to cover certain matters in the original proposal, including in particular: (a) To advise on proposals for new towns. (b) To act as the channel through which advances are made to the new towns.

In addition the commission should be responsible for preparing the preliminary plan on which the draft designation order is based and should advise the minister on the area to be included. The engagement of consultants for the preliminary work has already

proved to be a failure in at least one instance and is not satisfactory for a variety of reasons. The proposed commission should be able to do this work with competence. Of course, the preliminary plan should not be regarded as a master plan to control the development corporation; it should merely indicate the possibilities of the site and its relation to the regional and national situation.

The minister has done an outstanding service to the country by his responsibility for the legislation under which the new towns are to be built, and his name should ever in the future be associated with it. He should, however, the present writer ventures to say, consider his own position in the execution of the scheme in its present form. He has made himself the autocrat of the new towns, subject to the Treasury but otherwise with practically unchallengeable power. He has the first and last word on almost everything in the new towns with no appeal against him. He calls them into being and they develop as he directs. That even a minister of the Crown should be in such a position can hardly be harmonized with the idea of democracy. On matters that may come to him or that he may require to come before him for decision he or his officers may have found it necessary to exercise a personal prejudgment, and such responsibility in a matter of such wide connotations as the founding and building of towns is greater than any man should bear. For that reason alone this independent commission should exist to which he should look for guidance and so that he may not stand alone. Its erection should be regarded as a matter of urgency, for evidence is accumulating that it is required.

#### § 7

We come to the conclusion of this book. In the course of it, emphasis has been placed upon the great national importance of the new developments in town building that Parliament has decided upon, the inauguration of which we are now witnessing. The way to those developments was heralded by the two garden cities, though there can be little doubt, as we have said, that the new towns policy has to be looked at primarily as a military measure and as a method of dispersing population and industry. For military reasons alone the further increase of London and the great cities has to be stopped, though the argument was ignored until the second war came, and dispersal had to be improvised. The nation has now learned by bitter experience that concentration of population is a national danger. It remains to be seen with what energy and seriousness the new system is carried out. If it be done too slowly, with insufficient attention to the fundamental civic, social, and industrial problems that arise, we may suffer, should another war occur, disasters on a scale that is at present only to be guessed at.

Fortunately, the new towns policy is not a mere defensive measure, for no more constructive plan for permanent improvement in the way of life of the people has ever been devised. Irrespective of military necessity, the new towns policy, if followed without deflection, would increase the health and happiness and the economic and social prosperity of the people as nothing else could do.

## § 8

Not only does the building of new towns contribute to the revitalization of this country, it shows the way to imperial development. As we have seen, in Ebenezer Howard's original book he claimed to base his scheme at least in part upon the mid-nineteenth-century colonization proposals of Edward Gibbon Wakefield, and the two garden cities were undertaken as home colonization schemes. They ought to be considered as providing models for the organization of the planned transfer of communities to Australia, New Zealand, Canada, and the African colonies. There can be no doubt that the Commonwealth needs nothing more urgently than a new kind of emigration policy. Wakefield, writing as long ago as 1849, said: 'We send out colonies of the limbs, without the belly and the head . . . colonies made up of a single class of persons in the community. . . . The ancients on the contrary sent out a representation of the parent State—colonists from all ranks.' Howard quoted him in full, but there is no need for us to do so. If emigration were to take the form of the establishment of new industrial towns, not villages but real towns, each with its agricultural belt, we should have the basis of a new population policy for the British Commonwealth. This would be the emigration of entire families, young and old people, not individuals expected to fend for themselves, but communities enabled to restart life where new industry was organized for their employment. The two garden cities show how it could be done, and the new towns policy of the Government points the way to its adoption. It is in such bold and well conceived enterprises that the vitality of the British peoples would be shown.

## § 9

As this book shows, the task of new town building, though by no means easy, is practicable. Its complex problems provide a means of engaging the energies and abilities of people in all walks of life, and their solution offers opportunities for art and science, for applying skill in self-government, and for increasing the pleasures of existence. If the development corporations for the new towns are allowed freedom of action and are enabled to plan and build with originality, invention, and the employment of new ideas, the feeling of something new being accomplished will prevail. The creation of new towns by the State will have grave dangers, if it causes any reduction of voluntary association and joint activity, which are the constructive elements of free communities. To call new towns into existence is political action on the highest level of State activity; but after providing the means of their existence the State must also devise the means to allow the communities to act. Of course, elements of social unconsciousness will be carried into the new towns, and to that extent direction will be necessary, but freedom and responsibility must not only be the aim, they must play their necessary part in the towns' formation and growth.

The main problem of the new towns will be leadership, which is the central problem of our society. This leadership the development corporations will have to foster.



When the problem was to find a leader or to allow someone to usurp the position and to follow him, it was easily solved; but to-day no such solution is possible either in the new towns or elsewhere. The problem is that of combining authority and freedom: how to maintain a common aim and individual independence. If the development corporations attempt to impose their plans and to rely upon compulsion, there will be no leadership. On the other hand if they reduce control so as to allow the towns to develop as circumstances and the multiplicity of individual wills make possible, there will be no leadership either. A new leadership has to be attempted in which an aim is recognized, which provides for individuals and associations to collaborate so as to reach it with their own leadership.

Will the development corporations be able to generate such leadership? The question is of paramount importance. It will be answered by the way in which the corporations, their governors and officials, are able to handle the conflicts that will arise. Conflicts are inevitable between the corporations and the original inhabitants, the residents, tradesmen, farmers, and others, the local authorities, the new inhabitants, and the industrialists that will come to the towns. These conflicts are not to be regarded as mere handicaps; they are the opportunities for agreement and accord, the means through which power is engendered for the building up of the community. They demand not the ability to compromise, but the much rarer ability of coming to an agreement in which opposing elements are joined to produce a new result.

To enable this to be done the development corporations will have to be allowed full scope, with the minimum of direction. The writer cannot avoid the reiteration of this statement, for he regards it as inescapable. Administration of the powers of the minister by officials of the department with no personal knowledge and no personal responsibility would wreck the schemes or at least lower the quality of their possible achievements. No doubt mistakes will be made; but that will not matter, if individuality of expression is given to the town builders; for the vital result will be an increase not only in their own but in national confidence and sense of achievement. There is need for a new spirit in architecture, and the new towns should provide a field for that new spirit; there is no less need for a new spirit in civic organization, both voluntary and official, and for the creation of new social institutions; the same need exists acutely in industry.

The governors of the new towns, and their officers, have an unprecedented responsibility. If they rise to it with imaginative energy, not being rigidly tied down by the central department, they will prove in an even more fruitful manner than is open to other responsible workers what is contained in a well-devised strategy of peace. For though the new towns may have been conceived in the strategy of war, they may none the less become the productive fruit of the most elevated aims for national wellbeing and keep this country in the forefront of the nations of the world.

## ACKNOWLEDGMENTS AND NOTES

THE revision of the first edition of this book has been a task occupying more than two years. When the book was first published, Letchworth was already a considerable achievement but there was not much to be said about Welwyn Garden City beyond what was hoped to be done; now there is a story to be told. In the first edition there were references to regional planning and to town building projects abroad that had kinship to the garden city, but in the present edition these references have been omitted, for reasons of space. The first and fourth parts of the book are new.

The writer expresses his thanks for information and help to Mr. J. D. Ritchie, secretary and manager of First Garden City Ltd., Letchworth, to Mr. A. C. Harwood, accountant, and Mr. O. S. Pratt, surveyor to First Garden City Ltd., to Mr. J. D. Rowland, clerk to the Letchworth Urban District Council, to Dr. B. Suggit, Letchworth medical officer of health, to Mr. J. F. Eccles, managing director of Welwyn Garden City Ltd., to Mr. Louis de Soissons, architect to Welwyn Garden City Ltd., to Mr. B. H. Deamer, clerk to the Welwyn Garden City Urban District Council, to Mr. C. W. Fox, architect to the Welwyn Garden City Urban District Council, to Mr. Gordon Stephenson, late of the Ministry of Town and Country Planning, to many people at Letchworth and Welwyn Garden City who in one way or another have aided him in this task of compiling a history as well as attempting an analysis and criticism of the two garden cities. He owes special thanks to Mr. Eccles.

The aim throughout has been not so much to express the author's opinions, which is reserved for another occasion, as to state the facts and to explain them, so as to provide what may be of interest and practical value to the builders of the new towns, and to those who may come to live and work in them. The subject of the future and completion of the two garden cities has never been far from the writer's mind. The book is as complete as a single hand could make it, and the faults in it are the author's own. The following notes are intended to amplify or comment upon certain statements in the text, and to provide references with the object of avoiding footnotes.

[Page 3.] Another important American study of cities is *The City: its Growth, its Decay, its Future*, by Eliel Saarinen (New York, 1943). The book is an argument for 'organic decentralization.' The author says:

. . . we are confronted with problems so entirely new, so completely reversed, and so utterly absent from the experience of any previous era, as to make a thoroughly new orientation most urgent.

The author's proposals are that the blighted and decayed areas of cities should be replanned, so that living and working conditions are related, and 'the individual town of the decentralized city becomes a small town surrounded by nature—like the medieval town.'

[Page 4.] Says Sir John Myres in *The Political Ideas of the Greeks*: 'The Greek word *polis* meant the organized community, which included the city and the inhabitants of the country surrounding it.'

[Page 10.] A description of a new linear town in dialogue form, 'a dream of 1940,' is contained in *The Ten-Year Plan*, by Stanley Freese (Cecil Palmer, 1932). The chaos of London leads to the remark 'it can't be rebuilt and must be dispensed with.'

[Page 27.] A book by a writer of German origin, Lawrence Gronlund, published in Philadelphia in 1884 under the title *The Co-operative Commonwealth: an Exposition of Modern Socialism*, appeared in an English edition in 1892, 'edited by George Bernard Shaw.' The edition contains nothing by Shaw, but the author says:

The working masses stay in our overcrowded cities because . . . a farm life has no attractions

for them. They are not going to leave the cities before they can carry with them the civilization in which they have been reared; and well it is that they cannot be made to do it. Only our commonwealth and collective control of all land can bring the pleasures and comforts of city life, the blessings of our civilization, into the country.

[Page 28.] Howard's work was ignored perhaps because it was the product of the intuition and enthusiasm of a man without academic or technical equipment and status. That it contained an idea and was the outcome of thought made it of no interest because English people are not interested in the products of the mind. What the intelligentsia's socialist paper the *Fabian News* (December 1898) said about Howard's book was characteristic, for it dismissed it in the words:

We have got to make the best of our existing cities, and proposals for building new ones are about as useful as would be arrangements for protection against visits from Mr. Wells's Martians.'

[Page 31.] The term 'garden city' when translated into other languages, such as *cité-jardin*, *Gartenstadt*, *ciudad-jardín*, *tuinstad*, etc., does not at all convey the idea of the original term and almost invariably means no more than a housing estate with gardens and single-family dwellings.

[Page 48.] Maxwell Fry is an exponent of the linear city, though he does not use the term in his book, *Fine Building* (Faber, 1944); neither does he refer to the garden cities, except for saying 'the original impulse towards official town-planning in England was the garden city.' He does not cite Letchworth or Welwyn Garden City by name, though he prints a good aerial picture of the latter town as illustrating 'the principle of limited urban growth within the framework of agriculture.' All this is odd, as, for a full exposition of his subject, reference to the garden cities was necessary and would have made his treatment of it more concrete.

[Page 54.] Among the original buildings on the estate was Letchworth Hall, a late Jacobean house of the early seventeenth century, built by Sir William Lytton, containing some remains of a fifteenth-century building and evidences of a Saxon origin. The present house is a picturesque building in brick, and has an unusual T-shaped plan. A tower was added in 1846 by the Rev. John Alington, from whose successors the estate was purchased for the garden city. The house has some interesting seventeenth-century woodwork, and a carved clunch fire-place of the same period. It was converted into an hotel by the garden city company. Near Letchworth Hall there is a rectangular building of timber with brick nogging, originally built as a farmhouse in the early seventeenth century. It had been converted into cottages, but is in good condition, and is an interesting example of the building of the period. At Letchworth Corner there is a brick and timber building, also of the early seventeenth century, which had been converted into cottages, but has since been much restored. The tiny church is of the twelfth century, built of flint rubble, with thirteenth- and fifteenth-century work, and some fifteenth-century brasses. Thus Letchworth is by far the most historically interesting part of the garden city. The British highway the Icknield Way runs through its northern boundary and there have been found evidences of Roman occupation. There is a tumulus near Wilbury Hill.

Norton was larger in population than Letchworth, having an inn and a village shop. Its church, dedicated in the eleventh century, with remains of twelfth- and fifteenth-century work, has been much altered. There are some pleasing thatched cottages in the village and some old timber and brick houses, but no buildings of historical interest.

Willian has a twelfth-century church, with a tower of the fifteenth century, and is architecturally interesting. In the village there is the old rectory, a small building of timber and plaster, belonging to the sixteenth century. Also a seventeenth-century L-shaped house known as Puncharden Hall, built of timber and plaster. There was an inn and a bakery and general store in the village at the time of the purchase of the estate.



[Page 85.] It may be worth while to record the names of the people the present writer remembers most clearly as among those who played a part in creating the original garden city in the first seven years. Had it not been for James Brown of Baldock and his solicitor son Charles, there probably would have been no garden city at Letchworth, for they found the land, and they deserve recognition for this work of initiative. Raymond Unwin and Barry Parker are referred to in the text, but not the names of Robert Bennett and Wilson Bidwell, members of their original staff, who worked on the town-plan and afterwards set up business on their own, becoming the leading firm of architects in the town. Sir Ralph Neville and Thomas Adams left the company at too early a stage for them to have had much effect upon the town. Aneurin Williams as chairman of the board, cautious, conscientious, and of absolute integrity, had a profound influence, and among other members of the board who made contributions of various kinds, though they (except the last named) seldom visited the estate, were Edward Cadbury, H. B. Harris, Franklin Thomasson, and Col. F. S. Bowring. A director who lived in the town and threw himself actively into many phases of its social life was H. D. Pearsall, to whom the town owes a large debt. Of the company's officials, Harold Craske, the secretary, did not step outside his official sphere, except to organize the golf club; H. Burr, the surveyor, stuck to his job, played cricket, and merely lodged in the town, taking no share in its social affairs; but W. H. Gaunt, the managing agent, who came from Manchester, made himself felt. He took a leading part in many activities, made it clear that he was going to stand no nonsense from the idealists, and that the company was a business concern intending to make its business pay. He was a centre of controversy that never died down until he left the company, but not the town, in 1917. If other members of the company's staff are not named it is not because their part was unimportant, for they all had a useful place in the town's life, though they were there to do their jobs; but the assistant engineer, S. H. Donnelly, and the architect, C. Murray Hennell, ought to be mentioned, if only for their histrionic abilities, and so should F. W. Rogers, though not for that reason, but the outstanding personality among them was the forester, F. J. Cole, whose erratic and independent character made him—shall we say?—notorious; he was much liked by some, including the present writer, for his generosity and enthusiasm: unfortunately he went away to British Columbia. Men associated with the work of the company from the outside whose advice counted for much included G. R. Strachan, a well-known civil engineer, and Sir H. Trustram Eve, the well-known surveyor, and an early benefactor was G. Christie-Miller. The public works contractor, Charles F. Ball, came to the town for business and remained there to become one of its devoted citizens. The first editor of the *Citizen*, A. W. Brunt, became the local historian and the town's leading public man. W. G. Furnston of the Skittles Inn, referred to in the text, was probably the best-known character in the town and still retains that title; a confirmed cockney, and a vegetarian, he took the garden city seriously and cultivated a small holding as well as doing his arduous job. Among the original inhabitants who in one way or another contributed to the making of the town and had distinctive personal qualities were the bookbinder Douglas Cockerell, the Roman Catholic historian, Dr. Adrian Fortescue, the expert on William Blake, Joseph H. Wicksteed, the educationist Sir John E. Gorst, the preacher and social reformer Rev. J. Bruce Wallace, the monetary reformer Arthur Kitson, the guild socialist S. G. Hobson, the twin brother poets and philosophers, William Loftus and Harold E. Hare, the poet H. B. Binns, the publisher H. R. Dent, and his brother Jack Dent, the present chairman of Dent's, W. G. Taylor, the novelist Charles Lee, the musician Dalhousie Young, the artists Harold Gilman, C. F. Fox, Onslow Whiting, Edward Docker, R. P. Gossop, W. W. Ratcliffe, F. S. Ogilvie, Bradford Perin, and Stanley Parker, the printer Bernard Newdigate, the singer Jenny Atkinson, the actor Frank Reynolds, the free churchmen the Stark brothers, the house agents Edgar Simmons and

T. C. Howard, the doctors R. H. Crowley, Norman Macfadyen, and Miss M. Gilford, the co-operator B. Williams, the schoolmaster John Russell, the lawyer Dr. M. Gilbert-Smith, the retired ministers Rev. W. J. Jupp, Rev. H. Cubbon, and Rev. A. Buckley, the musician Miss Margaret Fowles, the philanthropic Miss A. J. Lawrence who built the Cloisters, Miss Juliet E. Reckitt, who built the Friends' Meeting House, the ornithologist F. B. Kirkman, the secularist George Crosoer, the anarchist James Henderson, the retired Arthur Bates, the publicist W. H. Knight, the politician H. Bond Holding, the civil servant S. W. Palmer, the trade unionist W. F. Kensett, the weaver Edmund Hunter, the socialist W. J. Brooks, the adult school enthusiast F. G. P. Radclyffe, the journalist 'Kuklos,' the socialist nurserymen J. J. Kidd and Hal Jones, the social democrat T. G. Rogers, and the I.L.P.-ers George Bates and B. J. Ellis, the printer W. F. Moss, the chemist C. F. Townsend, the Ruskinian W. H. Burrow, the young Ewart G. Culpin, who was to become chairman of the London County Council, the Australian Edgar Wing, and the garden city enthusiasts T. D. James, James Langston, Ewart James, Miss Grace Stabb, Miss Hope Rea, Miss A. M. Nicholson, and goodness knows how many more. Among the town's schoolmasters, C. A. Pease and J. A. N. Stephenson left their mark. Among the town's ministers of religion were the Rev. F. N. Heazell, the Rev. R. W. Jackson, and Dr. Fortescue already mentioned. Among the architects were H. Clapham Lander, W. H. Cowlshaw, C. M. Crickmer, and Allen Foxley, and among the builders, T. J. Openshaw, Howard Hurst, Frederick Palmer, and Beckley & Turpie. Among the tradesmen Alfred Snowden, E. H. Wightman, A. T. Crouch, H. Gomersall, P. Beddoe, and C. T. Ansell. One of the town's early residents was A. C. Maclean, who was employed by the Spirella Company, and, in his spare time in the garage of his home, started the manufacture of Maclean's stomach powders, which became the foundation of Macleans Ltd., a business out of which he made a fortune. When the successful and highly profitable nature of his business was proved Maclean moved from Letchworth and gave up his job to concentrate upon it, so that except in an incipient sense he was never a Letchworth manufacturer: he died a knight. This is by no means a complete list of people who deserve to be mentioned; there were others who influenced the town in its early years, as much perhaps as some of those here referred to, and injustice has been done by omitting them, but the injustice is unintentional, and to them or their friends the writer offers his apologies. The reason for referring to them at all is to recall the great variety of talents and the diversity of individuals that made the early community and caused the town to be so interesting a place in which to live. The first new house was occupied by Miss T. H. Revell; but as a resident she was preceded by the present writer, who may venture in this place to record that he was established in lodgings on 2nd March 1904, remained in the town until 1920, and regards himself as having been the town's first new inhabitant. Earlier people were only visitors, as he had been himself, engaged on the company's business. It is largely from the first-hand knowledge so gained that this book has been written. Many Russian refugees found a temporary home in the town, including for a short time V. I. Lenin himself. An account of the town and its inhabitants to 1914 is contained in *Pageant of Letchworth* by A. W. Brunt (Letchworth Printers Ltd., 1942), and a record of personal reminiscences by W. G. Furnmston, *Ancestral Jottings* (n.d.), to both of which books the reader is referred.

[Page 129.] The following is the main reference to Letchworth in Sir Patrick Abercrombie's *Report on Greater London, 1944*:

This, the first garden city, is a steadily expanding industrial town, the centre of the Hitchin-Letchworth-Baldock complex. It is the obvious industrial centre for this part of the region, and in the present report is planned for a considerable absorption of London population (19,000 persons). The fixing of a definite green belt and limit of expansion is very desirable. On the south-west this will involve the reservation of land in the Hitchin urban district; on the north-west, the east side of Stotfold Road should be the limit as far as Wilbury Road. On the east,



industrial development on the south side of the railway threatens to join up Letchworth and Baldock, and in order that this merging along the Baldock road should not take place further development should be stopped west of the First Garden City pumping station as far north as the railway. On the south, adequate land is available for parkway treatment of Letchworth Gate and to preserve a deep green belt between development and the Great North Road; but it is essential that the land on the east side of the Great North Road (not owned by the First Garden City Ltd.) should also be in the green belt.

The suggestion that 170 acres are needed for an extension to Letchworth's industrial estate (on the ground that the present 170 acres caters for 17,000 persons, and, therefore, double that area is needed for a population of 35,000) contemplates an excessive increase in industry. Such an area on the east would mean the complete filling up of all the open land on both sides of the railway between Letchworth and Baldock and would bring industry right on to the western fringe of Baldock. A far smaller area would meet all normal future requirements. Before the war the industrial area employed numerous persons from surrounding centres such as Hitchin, Baldock, Stotfold, etc.; in other words, the industry here caters for a much bigger population than 17,000, probably at least 26,000—hence adding 17,000 population will not necessitate anything like a doubling of the area. Furthermore, the gasworks and abattoir occupy another twelve acres and these sites will not require any corresponding extension with an increase in population to 35,000; there are also approximately fourteen acres of vacant sites and a number of the present occupied sites are capable of extension. It appears that approximately 140 acres are occupied by factories and before the war employed about 7,600 persons, and that an increase in the population of Letchworth to 35,000 would produce another 5,300 persons wanting factory work. Allowing for existing factories to increase their numbers by approximately 20 per cent, factory space will be required for another 3,800 people, and on the basis of the existing density of persons per factory acre at Letchworth this will need fifty-eight acres, of which about fourteen acres are vacant, giving a net additional area of forty-four acres. Even if the possibility of any existing factory expanding is discounted (a most unlikely event), only eighty-three acres extra are needed.

Assuming some of the vacant sites are too small for factories, that some of the present factories will never be extended to their full capacity, that further industries may want rather more space than past concerns, and that some additional land will be required for sidings, it is probable that approximately seventy acres will be required, and for this an industrial belt is proposed on the north side of the railway as far as the refuse tip on the east side of the road from Baldock to Stotfold, though this rather overlooks Baldock. If on account of topographical difficulties this land is not in every way suitable or if eventually a greater area should be required (though this is unlikely), an area within the Hitchin urban district on the north-east side, where there is a new engineering factory, might be developed. The alternative is only to allow the location in Letchworth of factories employing a large number of persons per industrial area—if this course were adopted it would lead to considerable economy of land. After the war the most urgent necessity will be further housing and until this has been put in hand no further industry should be permitted entry to this town.

[Page 147.] The original directors of First Garden City Ltd. were Ralph Neville (chairman), Edward Cadbury, H. B. Harris, Ebenezer Howard, T. H. W. Idris, W. H. Lever, H. D. Pearsall, Franklin Thomasson, T. P. Ritzema, and Aneurin Williams. The present directors (1948) are Sir Eric Macfadyen (chairman), Ralph T. Edge, W. Lowther Kemp, Norman Macfadyen, J. A. Rosevear, and J. F. Thomasson. The secretary and manager is J. D. Ritchie. With the exception of Ebenezer Howard none of the directors received salaries or fees until 1920, from which date fees were paid to them.

[Page 159.] This matter is discussed in detail in *Some Notes on a Proposed New Form of Accounts for First Garden City Ltd.*, by C. B. Purdom (privately printed, 1915).

[Page 165.] See 'Land Tenure in Garden City' by Aneurin Williams in the appendix to *The Garden City*, p. 211 (1913).

[Page 184.] The original land purchase for the garden city was part of the Panshanger



estate. This estate, which included the manor of Digswell, had come into the possession of the Cowper family towards the end of the eighteenth century and remained in the possession of the Earls Cowper and finally in the hands of the trustees of the estate of the last earl, until part was sold at the auction referred to. The hamlet of Digswell Water was included, where at one time there had been a weekly market. Handside appears to have been a manor at one time. At the time of purchase, the buildings on the Welwyn Garden City estate consisted of a number of farmhouses and cottages, with an eighteenth-century residence known as Digswell House, built on the site of the original manor, and one modern house at Hatfield Hyde. Among the farmhouses was Digswell Lodge, a late seventeenth-century building in brick and timber, built around a central chimney stack; originally a hunting lodge, its carved staircase and other woodwork had been removed. There were several small seventeenth-century timber and brick cottages in various spots. There were two recognized homestead moats, one near Peartree Farm, the second still known as Moat Wood. The church standing in Digswell Park is twelfth century, with thirteenth-, sixteenth-, and eighteenth-century work, and nineteenth-century alterations and restorations; there are some fifteenth-century brasses and a few monuments. At Hatfield Hyde there is a Victorian church, built by the Salisbury family, and there were two rows of one-storey farm labourers' cottages, on the lowest architectural level, also built by the Salisburys; the latter have been demolished. Part of the ancient forest of oak, ash, and beech that within living memory had covered much of the estate still remained at Sherrards Park Wood, with some later plantations. The timber in the wood had been sold at the time of the purchase of the estate but was bought back by the garden city company.

[Page 221.] The author is indebted to Mr. R. L. Reiss for the information on which this account of the health service is based and for information about the boys' club.

[Page 256.] The greater part of this chapter is based on the present writer's paper *The Place of Welwyn Stores in the Welwyn Garden City* (1923).

[Page 265.] See the report of an address by the present writer on the Welwyn Stores, and the discussion thereon, in the *Welwyn Garden City News*, 27th February and 6th March 1925.

[Page 315.] *New Town: a Proposal in Agricultural, Industrial, Educational, Civic, and Social Reconstruction*. Edited by W. R. Hughes 1919.

[Page 318.] The following are the names of the present and past directors and officials of Welwyn Garden City Ltd.:

*Present Board of Directors:* Sir Theodore G. Chambers, K.B.E., F.S.I. (Chairman) (1920); Major-General J. Buckley, C.B.E., D.S.O., M.C. (1934); J. F. Eccles, O.B.E., A.C.A. Managing Director) (1945); A. K. Graham (1934); L. T. M. Gray (1928); C. E. Lumb (1946).

*The following have also acted as Directors:* Sir Ebenezer Howard (1920-8); Lord Layton (1920-4); Lord Lytton (1920-3); J. R. Farquharson (1920-6); Sir Francis Fremantle (1920-34); Sir John Mann (1920-3); C. B. Purdom (1920-8); Bolton Smart (1920-3); Samuel Smethurst (1920); Viscountess Rhondda (1920); Hon. J. J. Astor (1921-5); Edward Backhouse (1921-3); Sir John Henry (1923-8); Sir A. Kaye Butterworth, who was vice-chairman until 1928 (1923-1945); W. H. Close, M.C. (1922-6); Basil Backhouse (1924-6); Herbert Collins (1924-6); G. C. Bensusan-Butt, F.C.A. (1928-34); R. B. Petre, F.C.A. (1928-34); D. F. Waddington (1928-34); Charles Boot (1934-45); R. L. Reiss (1920-48).

For the first eight years the chairman and finance director, who devoted their full time to the company, were paid salaries, one other director and Ebenezer Howard received salaries, otherwise the members of the board were unpaid. After the reorganization in 1928 other directors received salaries and the rest of the board received fees.

Meetings of the board were held monthly. The administration of the business was

undertaken by the managing director with the assistance of the following principal executive officers: secretary and estate manager, F. M. Page; chief executive officer, H. T. Tigwell; chief accountant, G. A. Floyd; social relations officer, C. Dalton; chief engineer, J. Skinner, A.M.I.C.E. Architectural and town-planning work has been in the hands of Louis de Soissons, A.R.A., F.R.I.B.A., S.A.D.G. Some of these officers have since been engaged by the development corporation. J. D. Haworth, M.S.E., was the company's consulting engineer in the early days when Captain W. E. James was the engineer to the company, before going over to the urban district council in 1937.

[Page 363.] When the Prime Minister's deputation returned from the Continent after its search for garden cities, the present writer was urgently invited to meet its two members to advise them as to what they might say to the Prime Minister. He outlined some suggestions which were put into writing a few hours later. A copy of the memorandum follows; it is reproduced as a matter of historical interest:

#### MEMORANDUM ON NEW TOWNS

1. The creation and development of new towns is required:

- (a) To overcome the shortage of houses on a large scale and in a manner that can be made to appeal to the public imagination;
- (b) to relieve the industrial congestion and traffic difficulties of London and other large centres;
- (c) to supply better equipped sites for industry and to meet the demand for improved factory conditions and the better development of the mining areas;
- (d) to bring agriculture and town development into closer relation, and in particular to assist in the economic establishment of land settlements for ex-service men and others.

The arguments in favour of this policy are not elaborated.

2. The object is to establish self-contained towns, each with

- (a) an industrial area;
- (b) a residential area;
- (c) an agricultural belt.

3. The sites for the towns could be found:

- (a) in rural districts, five to thirty miles from large towns;
- (b) in existing villages or small urban districts;
- (c) in areas adjacent to the new super-power stations and in new industrial, port, and mining areas.

4. The means required to carry out a workable scheme for the country as a whole are:

- (a) acquisition of the land at agricultural value;
- (b) suitable forms of central and local organization;
- (c) finance.

5. (A) Land:

The land could be acquired by the State by means of a rent charge as in the case of land settlements, or by the issue of land bonds to the owners, no capital expenditure therefore being necessary. The land should be on a main line of railway and a main highway, and wherever possible places where there are canal facilities and an existing drainage system and water supply should be chosen.

(B) Organization:

- (1) Central. A special commission or department to be set up consisting of persons appointed by (a) the Treasury, (b) Ministry of Health, (c) Board of Agriculture, (d) Board of Trade, (e) Ministry of Transport, (f) Ministry of Labour, (g) Trade Union Congress, to decide upon the areas where new towns should be started and to examine and approve of schemes.
- (2) Local companies to be formed under the Companies Acts to prepare and execute schemes, and to raise capital. By this means private initiative and enterprise would

be encouraged, local interest secured, and the danger of stereotyped schemes avoided. The co-operation of large manufacturers could be obtained. The local company to be supervised by the central department, the board of management to be representative of the central authority, the county council, the local authority, and the shareholders.

(C) Finance:

The financial basis of each scheme would be provided by the conversion of agricultural land into land possessing urban value, while increasing the value of a wide agricultural belt. Capital would be required for construction of roads, drainage, other public facilities for the development of the land; this money could be raised by the local companies from the general public on a State guarantee of interest and principal; the guarantee of interest being an amount equivalent to a return of (say) 2 per cent or 1 per cent below the current yield of Consols, calculated at the date of issue of the shares, with a maximum dividend payable out of profits limited to (say) 2 per cent or 1 per cent above the current yield of Consols. The capital would be required gradually as development proceeded. Much of it would be raised locally, and after development had definitely started some of it could be obtained on ordinary mortgage.

6. Houses for the working classes would be provided by the local authority, or in a rural area by the county council, under the present Government scheme. In the latter case, the houses would be transferred to the new urban authority as soon as created. The advantage of building houses in new towns instead of adding them to the suburbs of existing large towns is that the economic position in the new communities is likely to be better than in the large, highly rated, and expensively governed towns. Moreover, it might be possible for the local garden city companies to raise some of the money required for housing purposes as part of their capital (on State guarantee); the money then being loaned by the company to the local authority.
7. It should be an integral part of the scheme that each enterprise should be transferred to the local authority concerned as soon as the authority desired it and was in a position to undertake the financial responsibility. The terms on which such transfers would take place will require careful consideration.

4th November 1919.

[Page 364.] The section in the Housing (Additional Powers) Act, 1919, deserves to be put on record:

(1) Where the Minister is satisfied that any local authority (including a county council), or two or more local authorities jointly, or any authorized association, are prepared to purchase and develop any land as a garden city (including a garden suburb or a garden village), or any land in regard to which a town-planning scheme may be made for the purpose of such a scheme for the area in which the land is situate, in accordance with a scheme approved by the Minister, and have funds available for the purpose, he may, with the consent of the Treasury and after consultation with the Board of Trade, the Board of Agriculture and Fisheries, and the Minister of Transport, acquire that land on behalf of the authority or association either by compulsion or by agreement in any case in which it appears to him necessary or expedient so to do for the purpose of securing the development of the land as aforesaid, and may do all such things as may be necessary to vest the land so acquired in the local authority or association.

(2) The provisions of the Housing Acts, 1890 to 1919, relating to the powers of a local authority to acquire land for the purposes of Part III of the Housing of the Working Classes Act, 1890, shall apply for the purpose of the acquisition of land by the Minister under this section, and the Minister in exercising his powers of acquiring land under this section shall be subject to the same conditions as are applicable to the acquisition of land under the Housing Acts, 1890 to 1919, by a local authority:

Provided that, in the case of an order for the compulsory acquisition of land on behalf of an authorized association, the order shall be laid before each House of Parliament and shall not be confirmed by the Minister unless and until both Houses by resolution have approved the order, nor, if any modifications are agreed to by both Houses, otherwise than as so modified.

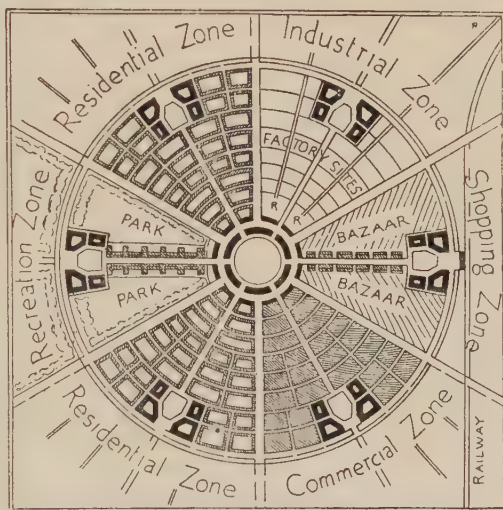


(3) A local authority shall have power to acquire land for the purposes of a scheme approved by the Minister under this section, and to develop any land so acquired in accordance with the scheme, and shall have power to borrow, as for the purposes of the Housing Acts, 1890 to 1919, any money required for the purpose of so acquiring or developing any land.

(4) In this section 'authorized association' means any society, company, or body of persons approved by the Minister whose objects include the promotion, formation, or management of garden cities (including garden suburbs and garden villages), and the erection, improvement, or management of buildings for the working classes and others, which does not trade for profit or whose constitution forbids payment of any interest or dividend at a higher rate than 6 per centum per annum. Housing (Additional Powers) Act, 1919, s.10.

[Page 366.] Two of the thirteen members of the Departmental Committee on Garden Cities and Satellite Towns dissented from the committee's conclusions. One said: '... as to the general desirability of satellite towns, I feel bound to record my view that their establishment is at the present time impracticable for financial and industrial reasons' (A. Ernest Bain). The other said: 'The notion that future growth should take the form of independent satellite towns is not based on convincing evidence, and the actual trend of events contradicts any theoretical argument in favour of the idea' (R. Bell). Both were, in fact, exponents of the 'natural tendency' point of view, and did not want natural tendencies resisted.

[Page 367.] A proposal for a *Hundred New Towns for Britain* was put forward in a pamphlet in 1933, written anonymously by 'Ex-service Man, J47485.' The author was A. Trystan Edwards, F.R.I.B.A., well known as a writer on architectural subjects. He got the project supported in a long letter to *The Times*, in February 1934, signed by a number of distinguished people, including Lord Semphill, Sir Robert Hadfield, Canon H. R. L. Sheppard, Sir Edwin Lutyens, Professor S. D. Adshead, and R. Coppock. His scheme was for building seventy-six new towns in England, fifteen in Scotland, and nine in Wales, and was put forward as a war memorial. Each town was to have a population of 50,000 on an area of about four square miles, and was estimated to cost about ten million pounds. An archetypal plan of a town was contained in the pamphlet showing a geometrical design, which was thought to illustrate the organic principles of town development: six zones consisting of three residential zones and shopping, commercial, and industrial zones. A railway was outside the town adjacent to the shopping zone. A limit of ten years was set for the execution of the entire scheme. No indication was given as to how the thing was to be done, and no attempt was made to outline the organization required. A feature of the scheme was that no debt was to be created, but the entire capital required, a total of a thousand million pounds, was to be issued by the Treasury in the form of new money. The author was thus a monetary reformer, but the monetary scheme was no more worked out than any other part of it. As the author was a man of literary gifts, the pamphlet was well and persuasively written. His scheme itself, apart from its monetary features, he had taken from the garden city proposals, and his arguments were



SCALE IN FEET 1000 2000 3000 4000 5000

A TRYSTAN EDWARDS IDEA OF A SMALL TOWN, PARTLY BASED ON HOWARD'S CONCEPTION

likewise those used on behalf of the garden city. He made no mention, however, of the garden city, or of Letchworth or Welwyn Garden City, and presented the proposal as if it were entirely new and invented by himself. Why this was so it is difficult to understand, except that Edwards was a critic of, and disliked, Raymond Unwin's planning ideas, neither would he have anything to do with the garden city. As an independent restatement of the garden city case the proposal had interest, but apart from its monetary element it had no original features.

[Page 368.] The reference in the recommendations of the Barlow report to garden cities and satellite towns is contained in the following paragraph (432):

The Board to be charged with the duty of preparing and submitting to the President of the Board of Trade a Special Report (which would be presented to Parliament) as to what further powers it requires, in addition to those described in the following paragraphs, for the purpose of giving effect to the objectives of national action as indicated in paragraph 428 above, viz.:

(a) Continued and further redevelopment of congested urban areas, where necessary.

(b) Decentralization or dispersal, both of industries and industrial population, from such areas. In this connection consideration to be directed to the methods by which such decentralization or dispersal should be encouraged and secured, in the form of garden cities, or by the development of existing small towns or regional centres.

(c) Encouragement of a reasonable balance of industrial development, so far as possible, throughout the various divisions or regions of Great Britain, coupled with appropriate diversification of industry in each division or region throughout the country.

[Page 369.] The note on green belts in the Scott report on *Land Utilization in Rural Areas* (1942) follows:

Although the term 'green belt' is of comparatively recent introduction it seized the public imagination and has become not only widely used but still more widely misused. It is a townsman's expression which embodies a townsman's point of view and has come, unfortunately, to mean a belt of open land—of commons, woods, and fields—to be 'preserved' from building (or, as is often said, 'sterilized') and so to serve as an encircling ring of green round the smoke and dirt of the town, perhaps with 'wedges' of green penetrating towards the heart of the town itself. But open land cannot be 'preserved' and such a concept is false. We conceive the green belt to be a tract of ordinary country, of varying width, round a town, and as a tract where the normal occupations of farming or forestry should be continued so that here, as elsewhere in rural land, the farmer is the normal custodian of the land. This is the reverse of 'sterilization': it is the preservation of fertility. But in the green belt there is a difference. The townsman himself is vitally concerned in the maintenance of the open character of the land, and the belt will naturally include golf courses and open common land primarily for his use. On the other hand the farmer is compelled to recognize that the farm land is serving a dual purpose, and that there may be types of farming (e.g. sheep rearing) unsuitable for such an area, where propinquity brings urban-minded people into rural surroundings. But in essence the green belt is just a tract of the countryside.

[Page 382.] The Greater London Interdepartmental Committee is composed of representatives of the Ministries of Town and Country Planning, Agriculture and Fisheries, Education, Fuel and Power, Health, Labour and National Service, Transport, Works, and the Board of Trade, other departments being represented as necessary.

[Page 383.] The first new town in Scotland, East Kilbride, has been planned by the Department of Health for a population of 40,000 to 45,000 on a site of over 10,000 acres, of which about 2,500 acres are to be the urban area. It is a hilly site about ten miles from the centre of Glasgow. The projected national highway from Carlisle to Glasgow runs through the centre. The existing population is 2,500. There are to be four neighbourhood units and three industrial sites, N., W., and S.E., the first of which is to be a Board of Trade trading estate, and the last developed for various Government purposes. The housing schemes are intended to be carried out by the development corporation.



[Page 387.] This figure of 1,000 acres of built-up land for each 10,000 population was given by Gordon Stephenson, F.R.I.B.A., late chief research officer, Ministry of Town and Country Planning, in a paper at the Town and Country Planning Summer School, Durham, September 1946.

[Page 394.] The Stevenage case, *Franklin v. Minister of Town and Country Planning* (1947) is likely to be a leading case in respect of action taken by the minister under this and other Acts, because in it the House of Lords established that the minister has no judicial or quasi-judicial duty, the duty imposed by the Act being purely administrative. There is no appeal against the minister's decisions.

[Page 396.] As a record of the minister's ideas and the Treasury's proposals, the following examples of advertisements for the chief executive position on the staffs of the new town corporations is given:

**NEW TOWNS.**—The Minister of Town and Country Planning is in a position under the provisions of the New Towns Act, 1946, to make a draft of the Orders under Section I designating the areas for the first new towns. If and when such Orders are made, after public inquiry, Corporations will be set up and it is contemplated that they will appoint CHIEF EXECUTIVE OFFICERS at a salary of £2,500 per annum. In anticipation of this the Minister invites applications for appointment to a limited number of temporary posts in the Ministry at the above-mentioned salary. Persons selected for such posts will, if they prove satisfactory, be recommended to the Corporations for consideration by them for appointment as

Chief Executive Officers. Applicants need not necessarily have professional qualifications in engineering or architecture, though experience of constructional operations would be useful. Most weight will be attached to experience of and evidence of capacity for large-scale organization and administration. Applications in writing, stating date of birth, giving full details of qualifications and experience (including a list in chronological order of appointments held), and quoting Reference Number J.A.355, should be received by the Ministry of Labour and National Service, London Appointments Office, 1-6 Tavistock Square, London, W.C.1, not later than 21st September 1946.

This was succeeded by advertisements on behalf of certain of the new towns themselves, of which the following examples are given:

**NEW TOWNS ACT, 1946.**—The HEMEL HEMPSTEAD DEVELOPMENT CORPORATION invites applications for the following senior posts. The officers appointed will be under the direction of the General Manager and will be responsible for the work of their respective departments as indicated below. Subject to suitable accommodation becoming available, the successful applicants will be required to reside in or near Hemel Hempstead. 1.

**ARCHITECT**, who should be a Fellow or Associate of the Royal Institute of British Architects, will be responsible for the architectural work undertaken by the Development Corporation and for supervising such work undertaken by other agencies in conformity with the approved town-plan; in conjunction with the Planning Consultant, will be responsible for architectural problems generally. 2. **ENGINEER**, who should be a corporate member of the Institution of Civil Engineers or the Institution of Municipal and County Engineers, will, in addition to the normal duties of a municipal or estate engineer, be responsible for the engineering work undertaken by the Development Corporation and for controlling such work undertaken by other agencies in conformity with the approved town-plan. 3. **ESTATES OFFICER**, who should be a Fellow or Associate of the Royal Institution of Chartered Surveyors or of the Auctioneers and Estate Agents Institute, will be responsible for valuation and management of property within the designated area, for rent collection and for advising on and carrying out the estate policy of the Development Corporation. 4. **FINANCE OFFICER**, who should be a Chartered or Incorporated Accountant or Certified Corporate Accountant, or a Fellow or Associate of the Institute of Municipal Treasurers and Accountants, will be responsible for the accountancy, costing, and general financial work and for advising on the financial policy of the Development Corporation. 5. **PUBLIC RELATIONS OFFICER**, will be responsible for interpreting to existing and incoming residents the aims and objectives of the Development Corporation, for acting as a channel of information between the local community and the Development

Corporation, for securing good relationships with local authorities and voluntary organizations, and for assisting in the development of social and cultural interests in the new town. 6. **ADMINISTRATIVE and LEGAL OFFICER**, who should be a solicitor or barrister, will be responsible for the legal work of the Development Corporation, particularly the purchase of land and conveyancing, and for the general administrative work of the Development Corporation's executive staff. Experience in local government will be an advantage.—Applications should be made in writing and should state: (i) name, address, and age, (ii) present post and salary, (iii) post applied for and salary required, (iv) particulars of education, (v) qualifications, (vi) particulars of experience, and (vii) the names and addresses of two persons to whom the Development Corporation may refer if it so desires. Applications, which will be treated as confidential, should be addressed to the General Manager, Hemel Hempstead Development Corporation, 11 Grosvenor Square, London, W.1 (the envelope being marked 'Private' and endorsed with the name of the post applied for), and should be received before the 20th May 1947.

**CRAWLEY DEVELOPMENT CORPORATION.**—The Development Corporation recently appointed for the establishment of a new town at Crawley invite applications for the undermentioned posts. The officers will be responsible heads of departments, and will be expected to work as a team under the direction of the Chief Executive Officer. The task is of a pioneering kind and calls for imagination, initiative, resource, and proved organizing ability of a high order. Applicants should show themselves possessed of this combination of qualities as well as of a recognized professional status. **CHIEF ENGINEER** (Ref. H.D.100): Applicants should be corporate members of the Institution of Civil Engineers and/or the Institution of Municipal and County Engineers, and should have had executive experience of large-scale civil engineering works. The successful applicant will be required to take charge of the civil engineering projects to be carried out on behalf of the Development Corporation.



**CHIEF ARCHITECT** (Ref. H.D.101): Applicants should be Fellows or Associates of the Royal Institute of British Architects and should, in addition, have had experience of town-planning work. The successful applicant will be required to co-ordinate the design and planning work in connection with the development of the town. **ESTATE OFFICER** (Ref. H.D.102): Applicants should be Fellows or Associates of the Royal Institution of Chartered Surveyors or of the Auctioneers and Estate Agents Institute, and should have had experience of the management of large urban estates. The successful applicant will be required to supervise the leasing of land, to manage the Corporation's own property, and to advise on all matters of estate development and on the promotion of industry and commerce. **LEGAL and ADMINISTRATIVE OFFICER** (Ref. H.D.103): Applicants should be Barristers or admitted Solicitors and should preferably have had experience in a Local Authority or Public Utility Undertaking. The successful applicant will be required to act as Secretary of the Corporation and to take charge of the administration and personnel services as well as of all legal questions. **CHIEF FINANCE OFFICER** (Ref. H.D.104): Applicants should be Chartered or Incorporated Accountants or certified Corporate Accountants and/or hold high municipal or other accounting qualifications, with a wide and varied experience in important financial and commercial affairs. It will be of advantage to have been in some branch of public service. The successful applicant will be required to take charge of all aspects of the Corporation's finances.—Applications, in writing, must quote the appropriate reference given above and should be submitted to the Crawley Development

Corporation, 11 Grosvenor Square, London, W.1, by the 24th May 1947, together with copies of three testimonials. Date of birth should be given as well as particulars of education, qualifications, appointments in chronological order, present salary, and salary now required.

**HARLOW DEVELOPMENT CORPORATION.—SOCIAL DEVELOPMENT OFFICER:** This officer will be responsible for directing and co-ordinating the development of the town into a balanced and self-contained community. He or she will be responsible for the direction of research into the social and economic problems encountered in the course of the town's development; additionally, he or she will be expected to interpret the needs and wishes of the community to the Corporation, and to be responsible for explaining the policy of the Development Corporation both to the people living in the town and to the general public. The important qualifications will include a wide knowledge of contemporary social and economic problems and of techniques for the assessment of human needs. Experience of large-scale public relations work is also desirable but not essential. Applications in respect of the above appointment should be made on the appropriate form, to be obtained from the General Manager, Harlow Development Corporation, care of The Ministry of Town and Country Planning, 11 Grosvenor Square, London, W.1, and must be received not later than 29th June 1947. The form of application not only indicates the salary payable and which will, in some measure, be determined by the experience of the applicant, but also gives further information relating to the appointment.

[Page 444.] See two papers by Theodore G. Chambers (afterwards Sir): 'The Rural Problem' (*Journal of the Farmers' Club*, April 1914); 'The Repopulation of our Rural Districts' (*Transactions of the Surveyor's Institution*, 1917, vol. xlix, p. 57).

[Page 445.] The so-called 'green girdle,' *grüne Gürtel*, advocated by Leberecht Migge and others in Germany after the first war, was a system of preserving areas of agricultural land adjacent to towns and their development by the inhabitants on a co-operative basis. It was an interesting contribution to the practical establishment and treatment of agricultural belts. See *Der Ausbau eines Grungürtels der Stadt Kiel* (1922) and the periodical *Siedlungs-Wirtschaft* which was published at Worpswede b. Bremen. An interesting agricultural development in association with industry was established in Germany by the Hirsch Copper and Brass Works Co., Eberswalde. See *Der Neubau*, August 1924, for account of this scheme.

[Page 446.] See what Marshall says on the effect of increase of population upon land:

... the cultivator gets good markets in which to supply his wants, as well as good markets in which to sell, he buys more cheaply while he sells more dearly, and the conveniences and enjoyments of social life are ever being brought more within his reach. *Principles of Economics*, Bk. V, ch. xi, § 1. Cf. also Bk. VI, ch. iii, § 6 of the same work.

[Page 446.] See 'The Agricultural Belts of Garden Cities' by Sir H. Trustram Eve (*Town-Planning Institute Papers*, vol. vii, p. 55). An inconclusive and sketchy paper, but interesting as one of the rare contributions to this subject.

[Page 447.] Marshall points out that natural beauties adjacent to a town possess a direct money value, though 'it requires some effort to realize it.' *Principles of Economics*, Bk. IV, ch. iii, § 7.

[Page 468.] *Principles of City Land Values*, by Richard M. Hurd, first published in New York in 1903, and reprinted several times since, is one of the most useful books on the subject. It contains many interesting diagrams and tables. The writer maintained that there was a direct relation between city population and values. He gave the following interesting table (p. 142), the figures in which, it should be noted, represent pre-1914 values:

City Population	Best Business Area per Front Foot		Best Residential Area per Front Foot		City Population	Best Business Area per Front Foot		Best Residential Area per Front Foot	
	£	to	£	to		£	to	£	to
25,000	62		82	5	300,000	514		925	41
50,000	123		205	8	600,000	822		1,438	103
100,000	247		411	15	1,000,000	1,438		2,055	144
150,000	308		514	21	2,000,000	1,849		3,288	205
200,000	370		616	21	3,500,000	3,699		7,192	822
									1,849

To convert the above figures to the rate per acre, multiply by 435·6. Another work is *City Growth and Values* by S. L. McMichael and R. F. Bingham (Cleveland, Ohio, 1923). Perhaps the most interesting discussion upon land values by an economist is contained in the Austrian Friedrich von Wieser's *Social Economics* (1928).

[Page 473.] Under the Licensing Bill presented to Parliament as this book goes to press it is intended to bring all licensed houses in and adjacent to the new towns under State management. Thus the towns will have no share in the management and profits of licensed premises (unless the Bill is amended). This is to carry centralization too far, which is the issue referred to in the text.

[Page 481.] As a matter of interest, the proposals contained in the first edition of this book for a Garden Cities Commission are set out below, with the explanatory introduction:

It is not desirable that the establishment and control of such enterprises as satellite towns should be placed directly in the hands of a Government department. The lack of initiative and the absence of desire to accept responsibility characteristic of State departments would be as great a disadvantage to satellite town development as to any other business. At present an 'authorized association' for the development of a garden city applying for a loan is brought under the control of the Ministry of Health and the Public Works Loan Board. The Minister of Health has to approve the scheme in general, which means that the officials of the ministry examine and report upon the town-planning, road construction, drainage, sewage disposal, water supply schemes, etc., in somewhat the same way as they do in the case of schemes submitted by a local authority. At Welwyn Garden City, which is the only scheme to which these legislative provisions have been applied, it has been found that the suggestions and criticisms of the Ministry of Health have been helpful; but at the same time there are indications that the requirements, administration, and conduct of the enterprise as a practical business undertaking are matters outside official experience. The Public Works Loan Board has sought to apply the same procedure that has been adopted in connection with loans for entirely different purposes, and the absence of precedent and the reluctance to create any new precedents have caused difficulties. It is clear that an entirely new system is needed for the proper exercise of authority over such schemes and for the provision of financial assistance. With that in view, the following tentative proposals for a Garden Cities Commission are made.

### PROPOSED GARDEN CITIES COMMISSION

#### *Constitution and Objects.*

A Garden Cities Commission to be formed by Act of Parliament charged with the duty of reporting upon garden city schemes, assisting in their preparation, supervising their construction, and helping in their finance. The Commission to consist of five members including a chairman, each of whom should undertake specific duties and give his whole time to the duties of his office. The members of the Commission to be appointed by the Minister of Health and to hold office for three years but be eligible for reappointment, two to retire each year except in the third year, when the chairman only would retire. The Commissioners to appoint a secretary and other officers.

#### *Consultative Council.*

A Consultative Council to be appointed to advise the Commissioners, consisting of one member nominated by each of the following bodies: Royal Institute of British Architects, Town-Planning Institute, Surveyors' Institution, Institute of Civil Engineers, Institute of Municipal and County Engineers, Institute of Transport, County Councils Association, Federation of British Industries, Trade Union Congress.



*Approval of Schemes.*

All schemes for garden cities to be submitted to the Commissioners for report thereon, the report to be submitted to the Ministry of Health, Board of Trade, Ministry of Transport, and Ministry of Agriculture. If the scheme is approved by these departments and by the Commissioners, a company to be formed under the Companies Acts to carry out the scheme. The company to have its own board of directors and officials and be responsible for its scheme. The constitution and capitalization of the company to be approved by the Commissioners.

*Finance of Schemes.*

Each garden city company to raise its own capital; or alternatively an issue of garden cities stock should be made under the auspices of the Commissioners. The capital required for the following objects to be raised subject to a State guarantee as to principal and interest for a period of fifty years: purchase of land, preparation of town-plan, construction of roads, drainage scheme, water, gas, and electricity supplies, and workmen's houses. The guarantee to be given subject to Treasury regulations and for expenditure previously approved by the Commissioners. The guarantee to be secured by a first charge on the company's property. The balance of the capital required for development expenditure and other purposes to be raised by the company without guarantee, the Commissioners to be satisfied that such capital is available as required; the amount of such capital to be at all times not less than 10 per cent of the total issued capital. The accounts to be subject to audit by the Commissioners. One half of the balance of net revenue after paying interest or dividend on capital and providing for reserves for depreciation of plant, etc., to be paid to the Commissioners. If any interest or other payment is made by the Commissioners under the guarantee, the amount so paid is to be treated as an advance to the company, to be repaid out of revenue before payment of interest or dividend on the capital not benefiting by the guarantee, and before providing for depreciation, etc.; or, alternatively, to be paid out of capital. The company to be empowered to pay interest on its shares out of capital for a period of years, subject to conditions to be laid down by the Commissioners.

*Expenses of the Commissioners.*

The expenses of the Commissioners to be met by fees paid by the local companies (on a scale approved by the Treasury) and by Parliament. (After a few years the work of the Commissioners should be self-supporting.) The amounts paid under guarantees should be provided out of a special fund for the purpose.

*Acquisition of Land.*

The Commissioners to have power to acquire land for the purpose of garden city schemes subject to the same conditions as are applicable to the acquisition of land under the Housing Acts by a local authority.

The above proposals are put forward as a skeleton scheme only, and would require considerable amplification and modification in practice. They are designed to give the utmost freedom to the respective local boards compatible with the financial obligations assumed by the central body, the object being to encourage local and private enterprise and initiative, and to avoid stereotyped schemes. . . .

The central body would give guidance to those proposing to start schemes, and the statutory support that could be available for new undertakings would make all the difference to their prospects of success. The Commissioners would be able to utilize the cumulative experience gained in the actual carrying out of garden city schemes for the benefit of successive schemes, and no one who has had anything to do with the actual development of a garden city will fail to realize the great practical value of such experience. It should not be possible for garden cities to be developed entirely independently of each other and without regard to the knowledge that has been gained in connection with earlier schemes. At present the absence of a central body actively in touch with the two existing schemes is distinctly felt, and with further schemes the disadvantage would be more acutely realized. A rapid multiplication of schemes is not looked for; but it is certain that if adequate assistance were provided it would be possible to put in hand a number of schemes in different parts of the country for which there is ample justification and even pressing need.



## NEW TOWNS ACT, 1946.

9 & 10 GEO. 6. C. 68.

An Act to provide for the creation of new Towns by means of development corporations, and for purposes connected therewith. [1st August, 1946.]

BE it enacted by the King's most Excellent Majesty, by and with the advice and consent of the Lords Spiritual and Temporal, and Commons, in this present Parliament assembled, and by the authority of the same, as follows:

1.—(1) If the Minister is satisfied, after consultation with any local authorities who appear to him to be concerned, that it is expedient in the national interest that any area of land should be developed as a new town by a corporation established under this Act, he may make an order designating that area as the site of the proposed new town.

Designation  
of sites of  
new towns.

(2) The provisions of the First Schedule to this Act shall have effect with respect to the procedure to be followed in connection with the making of orders under this section; and sections sixteen and seventeen of the Town and Country Planning Act, 1944 (which relate respectively to the validity and date of operation of orders under section one of that Act, and to the registration of such orders in the register of local land charges) shall apply to an order made under this section as they apply to an order made under section one of that Act.

7 & 8 Geo. 6.  
c. 47.

(3) An order under this section may include in the area designated as the site of the proposed new town any existing town or other centre of population, and references in this Act to a new town or proposed new town shall be construed accordingly.

2.—(1) For the purposes of the development of each new town the site of which is designated under section one of this Act, the Minister shall by order establish a corporation (hereinafter called a development corporation) consisting of a chairman, a deputy chairman and such number of other members, not exceeding seven, as may be prescribed by the order; and every such corporation shall be a body corporate by such name as may be prescribed by the order, with perpetual succession and a common seal and power to hold land without licence in mortmain.

Establishment  
and general  
powers of  
development  
corporations.

(2) The objects of a development corporation established for the purposes of a new town shall be to secure the laying out and development of the new town in accordance with proposals approved in that behalf under the following provisions of this Act, and for that purpose every such corporation shall have power to acquire, hold, manage, and dispose of land and other property, to carry out building and other operations, to provide water, electricity, gas, sewerage, and other services, to carry on any business or undertaking in or for the purposes of the new town, and generally to do anything necessary or expedient for the purposes of the new town or for purposes incidental thereto:

Provided that, subject to the provisions of this Act with respect to the making of advances to development corporations, a development corporation shall not have power to borrow money.

(3) Without prejudice to any provision of this Act requiring the consent of the Minister to be obtained for anything to be done by a development corporation, the Minister may give directions to any such corporation for restricting the exercise by them of any of their powers under this Act, or for requiring them to exercise those powers in any manner specified in the directions:

Provided that:

(a) before giving any such directions the Minister shall consult with the chairman

Establishment  
and general  
powers of  
development  
corporations  
—*cont.*

of the corporation, or, if the chairman is not available, with the deputy chairman, unless he is satisfied that, on account of urgency, such consultation is impracticable; and

- (b) any transaction between any person and any such corporation acting in purported exercise of their powers under this Act shall not be void by reason only that it was carried out in contravention of such directions unless that person had actual notice of the directions.

(4) For the avoidance of doubt it is hereby declared that the provisions of subsection (2) of this section with respect to the powers of development corporations relate only to their capacity as statutory corporations; and nothing in this section shall be construed as authorizing the disregard by a development corporation of any enactment or rule of law.

(5) The provisions of the Second Schedule to this Act shall have effect with respect to the constitution and proceedings of any development corporation established under this Act.

Planning and  
control of  
development  
in new towns.

3.—(1) The development corporation established for the purposes of a new town shall from time to time submit to the Minister in accordance with any directions given by him in that behalf their proposals for the development of land within the area designated under this Act as the site of the new town, and the Minister, after consultation with the local planning authority within whose district the land is situated, and with any other local authority who appear to him to be concerned, may approve any such proposals either with or without modification.

22 & 23  
Geo. 5. c. 48.

(2) Without prejudice to the generality of the powers conferred by section ten of the Town and Country Planning Act, 1932, a special interim development order made by the Minister under that section with respect to an area designated under this Act as the site of a new town may grant permission for any development of land in accordance with proposals approved under subsection (1) of this section, subject to such conditions, if any (including conditions requiring details of any proposed development to be submitted to the interim development authority), as may be specified in the order.

(3) (Repealed by the Town and Country Planning Act, 1947.)

(4) (Repealed by the Town and Country Planning Act, 1947.)

Acquisition of  
land by  
development  
corporations.

4.—(1) The development corporation established for the purposes of a new town may, with the consent of the Minister, acquire by agreement, or may be authorized by means of a compulsory purchase order made by the corporation and submitted to and confirmed by the Minister to acquire compulsorily:

- (a) any land within the area designated under this Act as the site of the new town;
- (b) any land adjacent to that area which they require for purposes connected with the development of the new town;
- (c) any land, whether adjacent to that area or not, which they require for the provision of services for the purposes of the new town;

and the provisions of Part I of the Second Schedule to the Town and Country Planning Act, 1944 (which relates to the procedure for making and confirming compulsory purchase orders) shall apply in relation to a compulsory purchase order under this section as they apply in relation to an order authorizing a local planning authority to acquire land compulsorily under Part I of that Act.

(2) In relation to the acquisition of land by a development corporation under this section, the following provisions of the Town and Country Planning Act, 1944, that is to say:

- (a) sections thirteen and fourteen (which contain special provisions as to the acquisition under Part I of that Act of land belonging to statutory undertakers and land forming part of commons and other open spaces);
- (b) sections sixteen and seventeen (which relate respectively to the validity and date of operation of compulsory purchase orders under Part I of that Act, and to the registration of such orders in the register of local land charges); and

(c) section eighteen (which applies the Lands Clauses Acts subject to modifications, including modifications providing for expediting the completion of compulsory purchases under that Part),

shall apply as they apply in relation to the acquisition of land by local planning authorities under Part I of that Act.

(3) Section two of the Acquisition of Land (Authorization Procedure) Act, 1946 (which confers temporary powers for the speedy acquisition of land by local authorities having power to purchase land in accordance with section one of that Act or the Town and Country Planning Act, 1944), shall have effect as if references therein to a local authority included references to a development corporation:

9 & 10 Geo. 6.  
c. 49.

Provided that without prejudice to the provisions of the said section two restricting the period within which an authorization may be given thereunder for the compulsory acquisition of land, no such authorization shall be given for the compulsory acquisition of land by the development corporation established for the purposes of a new town at any time after two years from the date on which the order under section one of this Act designating the site of the new town became operative.

(4) For the purposes of subsection (3) of section six of the Acquisition of Land (Authorization Procedure) Act, 1946 (which relates to the acquisition of inalienable land) this Act shall be deemed to have been passed before the commencement of that Act.

(5) A compulsory purchase order under this section shall, in so far as it authorizes the compulsory purchase of land which is the property of a local authority, or of land belonging to the National Trust which is held by the Trust inalienably, be subject to special parliamentary procedure in any case where an objection to the order has been duly made by the local authority or by the Trust, as the case may be, and has not been withdrawn.

(6) The provisions of Part VIII of the Requisitioned Land and War Works Act, 1945 (which provides for the adjustment of compensation on the acquisition of land in certain cases), shall have effect where, in pursuance of a notice to treat served or deemed to be served before the expiration of two years from the end of the war period within the meaning of that Part, land which at the date of the notice to treat is, by virtue of an exercise of emergency powers as defined by that Act, in the possession of a Minister as so defined, or of a person acting under the authority of a Minister, is compulsorily acquired by a development corporation under this Act.

8 & 9 Geo. 6.  
c. 43.

(7) For the avoidance of doubt it is hereby declared that a development corporation established under this Act is a public authority within the meaning of the Acquisition of Land (Assessment of Compensation) Act, 1919, and that Part II of the Town and Country Planning Act, 1944, applies accordingly for the purpose of the assessment of compensation for the compulsory purchase of land by such a corporation.

9 & 10 Geo. 5.  
c. 57.

5.—(1) Subject to any directions given by the Minister under this Act, the development corporation established for the purposes of a new town may dispose of any land acquired by them to such persons, in such manner, and subject to such covenants or conditions as they consider expedient for securing the development of the new town in accordance with proposals approved by the Minister under the foregoing provisions of this Act:

Disposal of  
land by  
development  
corporations.

Provided that a development corporation shall not have power, except with the consent of the Minister, to transfer the freehold in any land or to grant a lease of any land for a term of more than ninety-nine years, and the Minister shall not consent to any such disposal of land unless he is satisfied that there are exceptional circumstances which render the disposal of the land in that manner expedient.

(2) The powers of a development corporation with respect to the disposal of land acquired by them under this Act shall be so exercised as to secure, so far as practicable, that persons who were living or carrying on business or other activities on land so acquired shall, if they desire to obtain accommodation on land belonging to the



Disposal of  
land by  
development  
corporations  
—*cont.*

corporation, and are willing to comply with any requirements of the corporation as to its development and use, have an opportunity to obtain thereon accommodation suitable to their reasonable requirements on terms settled with due regard to the price at which any such land has been acquired from them.

(3) Nothing in this Act shall be construed as enabling a development corporation to dispose of land by way of gift, mortgage, or charge, but subject as aforesaid references in this Act to the disposal of land shall be construed as references to the disposal thereof in any manner, whether by way of sale, exchange, or lease by the creation of any easement, right or privilege, or otherwise.

Supple-  
mentary  
provisions as  
to land.

6.—(1) In relation to land acquired by a development corporation under this Act, the following provisions of the Town and Country Planning Act, 1944, that is to say:

- (a) section twenty-two (which authorizes the development of land acquired under Part I of that Act notwithstanding interference with easements and other rights);
- (b) sections twenty-three to twenty-five (which relate to the extinction of highways, private rights of way, and rights as to apparatus on land acquired under the said Part I);
- (c) sections twenty-eight and twenty-nine (which relate to the use of consecrated ground, burial grounds, and commons and other open spaces acquired under that Part); and
- (d) section thirty (which relates to displacements from land acquired under that Part);

shall apply as they apply in relation to land acquired by a local planning authority under Part I of that Act.

(2) Where a public right of way over a road on land acquired by a development corporation under this Act is extinguished by an order made under section twenty-three of the Town and Country Planning Act, 1944, as applied by this section, and compensation in respect of restrictions imposed under section one or section two of the Restriction of Ribbon Development Act, 1935, in respect of that road has been paid by the highway authority (or, in the case of a trunk road, by the authority for the purposes of section four of the Trunk Roads Act, 1936), the order may provide for the payment by the development corporation to that authority, in respect of the compensation so paid, of such sums as the Minister, with the consent of the Treasury, may determine.

1 Edw. 8. &  
1 Geo. 6. c. 5

(3) It shall be the duty of the Minister to give to any development corporation established under this Act such directions with respect to the disposal of land acquired by them thereunder and with respect to the development by them of such land, as appear to him to be necessary or expedient for securing, so far as practicable, the preservation of any features of special architectural or historic interest, and in particular of buildings included in any list compiled or approved under section forty-two of the Town and Country Planning Act, 1944 (which relates to the compilation or approval by the Minister of lists of buildings of special architectural or historic interest).

(4) Where any land within the area designated by an order under section one of this Act as the site of a new town has not been acquired by the development corporation within the period of seven years from the date on which that order became operative, any owner of that land may by notice in writing served on the corporation require them to purchase his interest therein; and thereupon the corporation shall be deemed to have been authorized to acquire that interest compulsorily under the foregoing provisions of this Act, and to have served notice to treat in respect thereof on the date on which the notice was served on them under this subsection.

Highways.

7.—(1) In relation to an area designated under this Act as the site of a new town, section three of the Town and Country Planning Act, 1944 (which provides for the acquisition by local highway authorities and by the Minister of Transport of land required for the construction or improvement of roads communicating with areas of extensive war damage or with land which is to be made available for providing for

relocation of population or industry, or for replacement of open spaces, in the course of the redevelopment of such areas) shall apply as it applies in relation to the areas of land referred to in paragraphs (a) and (b) of subsection (1) of that section.

(2) Section ten of the Development and Road Improvement Funds Act, 1909 (which enables the Minister of Transport to authorize the construction of new roads in respect of which advances are made under that Act and provides for the expenses of the construction, and for the maintenance, of such roads) shall apply in relation to the construction of a new road by a local highway authority on land transferred to or acquired by them under this Act as if the road were a road in respect of the construction of which an advance were made to that authority under that section. 9 Edw. 7. c. 47.

(3) The Minister of Transport may direct that any road constructed by him on land transferred to or acquired by him under this Act shall, on such date as may be specified in the direction, become a trunk road within the meaning of the Trunk Roads Acts, 1936 and 1946, and the provisions of those Acts shall apply to the road accordingly.

8.—(1) A development corporation shall be deemed to be a housing association within the meaning of the Housing Act, 1936, and accordingly arrangements may be made under section ninety-four of that Act for the provision by such a corporation of any housing accommodation which a local authority are empowered to provide under that Act. Housing.  
26 Geo. 5. &  
1 Edw. 8.  
c. 51.

(2) For the purposes of the Housing (Financial and Miscellaneous Provisions) Act, 1946, the Minister of Health may approve any house provided by a development corporation otherwise than in pursuance of such arrangements as aforesaid as if it were a house provided by a local authority, and in respect of any house so approved the Minister of Health may, if he thinks fit, pay to the corporation, out of moneys provided by Parliament, sums not exceeding the annual exchequer contributions which would be payable under that Act if the house had been provided by such an authority. 9 & 10 Geo. 6.  
c. 48.

(3) Where, in pursuance of any agreement or order made under the subsequent provisions of this Act, a house provided by a development corporation, being a house in respect of which an annual exchequer contribution is for the time being payable under section ninety-four of the Housing Act, 1936, or under subsection (2) of this section, is transferred to a local authority within the meaning of the said Act, then:

(a) the said contribution shall cease to be payable as aforesaid; and

(b) the Minister of Health may, if he thinks fit, pay to the local authority, out of moneys provided by Parliament, sums not exceeding the annual exchequer contributions which would be payable in respect of the house if it had not been so transferred.

9.—(1) If the Minister of Health is satisfied that it is expedient, in consequence of the making of an order under section one of this Act, that the area designated by that order as the site of the new town, or any larger area comprising that area, should be constituted a united district for any purpose for which a united district may be constituted under section six of the Public Health Act, 1936, he may make an order under that section constituting that area a united district for that purpose notwithstanding that no application in that behalf is made to him by the local authorities for the districts concerned, or by any of those authorities. Public health.  
26 Geo. 5. &  
1 Edw. 8.  
c. 49.

(2) The Minister of Health may, on an application in that behalf made to him by the development corporation established for the purposes of a new town, by order authorize that corporation to exercise, for the purpose of the sewerage of the area designated under this Act as the site of the new town, any powers exercisable by a local authority under section fifteen of the Public Health Act, 1936 (which relates to the construction of sewers and sewage disposal works); and without prejudice to the provisions of this Act with respect to the acquisition of land by development corporations, any such order may provide for transferring to the development corporation any sewers or sewage disposal works vested in the sewerage authority for any district which comprises the area designated as the site of the new town or any part of that area:



Public health  
—cont.

Provided that before making any order under this subsection the Minister of Health shall consult with the council of the county and of the county district in which the new town or any part thereof is situated.

(3) Any order made under the last foregoing subsection may direct that any of the provisions of the Public Health Acts, 1936 and 1937, relating to sewerage and sewage disposal, or to sewers, drains, cesspools, and sanitary conveniences (including the provisions of the Public Health Act, 1936, relating to the payment of compensation, the breaking open of streets and the power to enter on land) shall apply in relation to the area designated as the site of the new town, subject to such modifications as may be specified in the order, as if the development corporation were a local authority as defined by those Acts and as if sewers vested in the corporation were public sewers as so defined.

(4) Where, in pursuance of an order made under subsection (2) of this section, sewers or sewage disposal works are constructed by or vested in a development corporation for the purposes of the sewerage of any part of the district of a sewerage authority within the meaning of the Public Health Act, 1936, that authority shall make towards the expenses of the development corporation in the construction or maintenance of the sewers or sewage disposal works contributions of such amount and subject to such conditions as may be agreed upon between that authority and the corporation or as may, in default of such agreement, be determined by the Minister of Health; and the payment of any such contributions shall be a purpose for which the authority may borrow money.

(5) Any order made under subsection (2) of this section which provides for transferring to the development corporation sewers or sewage disposal works vested in a sewerage authority may provide for the payment by the corporation to that authority, in consideration of the transfer, of such sum as may be agreed upon between the corporation and that authority or as may, in default of such agreement, be determined by the Minister of Health.

Statutory  
undertakers.

10.—(1) In relation to the provision of services by statutory undertakers for the purposes of new towns under this Act, and to the consequences of the acquisition of land thereunder, the following provisions of the Town and Country Planning Act, 1944, that is to say:

(a) section twenty-six (which provides for the extension and modification of the powers and duties of statutory undertakers in order to secure the provision of services for purposes in connection with which land may be acquired under Part I of that Act by a local planning authority, or in order to facilitate adjustments necessitated by the acquisition under that Part of land of the undertakers); and

(b) section twenty-seven (which provides for the relief of statutory undertakers from obligations the performance of which is rendered impracticable by the acquisition under Part I of that Act of land of the undertakers);

shall apply as they apply in relation to the provision of services for purposes in connection with which land may be acquired under Part I of that Act, and to the consequences of the acquisition of land under that Part.

(2) Without prejudice to the provisions of section twenty-six of the Town and Country Planning Act, 1944, as applied by the last foregoing subsection, if it appears to the Minister of Fuel and Power to be expedient for the purpose of securing an efficient supply of electricity or gas in an area designated under this Act as the site of a new town that any part of that area which is included in the limits of supply of any statutory undertakers authorized to supply electricity or gas (in this section referred to as 'the transferors') should be included in the limits of supply of any other such undertakers (in this section referred to as 'the transferees') he may by order provide for varying the respective limits of supply of those undertakers accordingly.

(3) An order made under the last foregoing subsection may provide for the transfer



to the transferees of any part of the undertaking of the transferors, and may contain such incidental, consequential, and supplementary provisions as the Minister of Fuel and Power thinks necessary or expedient for the purposes of the order; and in particular, but without prejudice to the generality of the foregoing provision, any such order may provide:

- (a) for transferring to the transferees any property or liabilities of the transferors;
- (b) for amending or repealing any local enactment (including any order or byelaw) relating to the undertaking of the transferees or of the transferors;
- (c) for requiring the transferees to pay to the transferors such sum by way of compensation as may be agreed upon between them, or, in default of such agreement, as may be determined by the arbitration of such tribunal as may be specified in the order:

Provided that in determining the sum to be so paid under any such order the tribunal shall not take account of any potential profit that might have been derived by the transferors from the development of land which ceases to be comprised within their limits of supply by virtue of the order, except in so far as such development would have been likely to take place if the land had not been included in the site of a new town under this Act.

(4) Provision shall be made by any order under subsection (2) of this section for securing that persons who, immediately before that order comes into operation, are employed by any undertakers whose limits of supply are varied by the order, and suffer damage in respect of their employment in consequence of the order, shall be entitled, in such cases, to such extent and subject to such conditions as may be prescribed by the order, to recover compensation in respect of that damage from such of those undertakers as may be specified therein; and for the purpose of prescribing the matters aforesaid any such order shall provide:

- (a) in the case of an order varying the limits of supply of undertakers authorized to supply electricity, for the application of provisions not less favourable to the persons employed by those undertakers than those of section sixteen of the Electricity (Supply) Act, 1919;
- (b) in the case of an order varying the limits of supply of undertakers authorized to supply gas, for the application of provisions not less favourable to the persons employed by those undertakers than those which, in the opinion of the Minister of Fuel and Power, would be applied to them if the variation were effected under arrangements approved by a special order made under the Gas Regulation Act, 1920.

9 & 10 Geo. 5.  
c. 100.

10 & 11  
Geo. 5. c. 28.

(5) An order made under subsection (2) of this section shall be subject to special parliamentary procedure, and the First Schedule to the Statutory Orders (Special Procedure) Act, 1945 (which sets out the notices to be given and other requirements to be complied with before an order is made), shall, in its application to any such order, have effect as if paragraph 1 of the said Schedule included a provision requiring the notice of the order as proposed to be made to be served by the Minister of Fuel and Power on the transferors and on the transferees.

9 & 10 Geo. 6.  
c. 18.

(6) In this section the expression 'limits of supply,' in relation to any undertakers, means the area within which those undertakers are authorized by any enactment to supply electricity or gas, as the case may be.

11. Without prejudice to the generality of the powers conferred on development corporations by the foregoing provisions of this Act, any such corporation may, with the consent of the Minister, contribute such sums as the Minister, with the concurrence of the Treasury, may determine towards expenditure incurred or to be incurred by any local authority or statutory undertakers in the performance, in relation to the new town, of any of their statutory functions, including expenditure so incurred in the acquisition of land.

Contributions  
by develop-  
ment corpora-  
tions towards  
expenditure  
of local  
authorities  
and statutory  
undertake

Advances and payments by Minister to development corporations.

12.—(1) For the purpose of enabling a development corporation to defray expenditure properly chargeable to capital account, including the provision of working capital, the Minister may make advances to the corporation repayable over such periods and on such terms as may be approved by the Treasury:

Provided that the aggregate amount of the advances made under this subsection, including advances made under this subsection in its application to Scotland, shall not exceed fifty million pounds.

(2) For the purpose of enabling a development corporation to defray any other expenditure, the Minister may, out of moneys provided by Parliament, make grants to the corporation of such amount as may be approved by the Treasury.

(3) The Treasury may issue to the Minister out of the Consolidated Fund such sums as are necessary to enable him to make advances to a development corporation under subsection (1) of this section.

2 & 3 Geo. 6.  
c. 117.

(4) For the purpose of providing sums (or any part of sums) to be issued under the last foregoing subsection, or of providing for the replacement of all or any part of sums so issued, the Treasury may, at any time, if they think fit, raise money in any manner in which they are authorized to raise money under the National Loans Act, 1939, and any securities created and issued to raise money under this subsection shall be deemed for all purposes to have been created and issued under that Act.

(5) All sums received by the Minister by way of interest on an advance made to a development corporation under subsection (1) of this section, and all sums received by way of repayment of the principal of such an advance, shall be paid into the Exchequer; and the Minister shall lay before each House of Parliament a statement of any sums due from a development corporation by way of interest on or repayment of any such advances which are not duly paid to him in accordance with the terms approved under the said subsection (1).

(6) The sums paid into the Exchequer under the last foregoing subsection shall be issued out of the Consolidated Fund at such times as the Treasury may direct, and shall be applied by the Treasury as follows, that is to say:

(a) so much thereof as represents principal shall be applied in redeeming or paying off debt of such description as the Treasury may think fit;

(b) so much thereof as represents interest shall be applied to the payment of interest which would, apart from this provision, have fallen to be paid out of the permanent annual charge for the National Debt.

(7) It shall be a condition of the making of advances to a development corporation under this section that the proposals for development submitted to the Minister under section three of this Act shall be approved by the Minister with the concurrence of the Treasury as being likely to secure for the corporation a return which is reasonable, having regard to all the circumstances, when compared with the cost of carrying out those proposals.

Accounts, audit, annual report, etc.

13.—(1) Every development corporation shall keep proper accounts and other records in relation thereto, and shall prepare in respect of each financial year annual accounts in such form as the Minister may, with the approval of the Treasury, direct.

(2) The accounts of a development corporation shall be audited by an auditor to be appointed annually by the Minister.

(3) As soon as the annual accounts of a development corporation for any financial year have been audited, the corporation shall send to the Minister a copy of the accounts prepared by them for that year in accordance with this section, together with a copy of any report made by the auditor thereon.

(4) The Minister shall prepare in respect of each financial year, in such form and manner and at such times as the Treasury may direct, an account of the sums issued to him out of the Consolidated Fund and advanced to a development corporation under section twelve of this Act and of sums received by him from that development corporation and paid into the Exchequer under the said section.

(5) On or before the thirtieth day of November in each year, the Minister shall transmit to the Comptroller and Auditor General the account prepared by him under the last foregoing subsection in respect of the last foregoing financial year and a copy of the annual accounts last sent to him by the development corporation under subsection (3) of this section, together with the report of the auditor thereon; and the Comptroller and Auditor General shall examine and certify the account prepared by the Minister and lay before each House of Parliament copies of that account, together with his report thereon, and copies of the audited accounts prepared by the development corporation.

(6) Every development corporation shall, as soon as possible after the end of each financial year, make to the Minister a report dealing generally with the operations of the corporation during that year, and the Minister shall lay a copy of every such report before each House of Parliament.

(7) Without prejudice to the requirement imposed by the last foregoing subsection, every development corporation shall provide the Minister with such information relating to the undertaking of the corporation as the Minister may from time to time require, and for that purpose shall permit any person authorized by the Minister in that behalf to inspect and make copies of the accounts, books, documents, or papers of the corporation and shall afford such explanation thereof as that person or the Minister may reasonably require.

14.—(1) Without prejudice to the powers of development corporations under this Act to dispose of any of their property, including any trade or business carried on by them, any such corporation may, by an agreement made with any local authority or statutory undertakers and approved by the Minister with the concurrence of the Treasury, transfer to that authority any part of the undertaking of the corporation or transfer to those undertakers any part of that undertaking consisting of a statutory undertaking, upon such terms as may be prescribed by the agreement:

Transfer of  
undertakings  
of  
development  
corporations.

Provided that:

(a) before approving an agreement under this subsection for the transfer of a statutory undertaking, the Minister shall publish in the London Gazette, and in one or more newspapers circulating in the area in which the new town is situated, a notice stating that the agreement has been submitted for approval, and describing the general effect of the agreement; and if within twenty-eight days from the publication of the notice in the London Gazette any objection to the agreement is made by any statutory undertakers who, within the said area or any area adjacent thereto, are carrying on or authorized to carry on a statutory undertaking of a character similar to the statutory undertaking proposed to be transferred by the agreement, the foregoing provisions of this subsection shall apply in relation to the agreement as if for the reference to the Minister there were substituted a reference to the Minister and the appropriate Minister; and

(b) before approving any agreement under this subsection, the Minister shall consult with the council of the county and of the county district in which the new town or any part thereof is situated, except where the agreement is made with that council.

(2) If the Minister is satisfied that it is expedient, having regard to any agreement made or proposed to be made under subsection (1) of this section, that the liability of the development corporation in respect of advances made to them under this Act should be reduced, he may, by an order made with the consent of the Treasury, reduce that liability to such extent as may be specified in the order:

Provided that an order under this subsection shall be of no effect until it is approved by resolution of the House of Commons.

(3) The payment of any sums payable by a local authority for the purposes of an



agreement under this section shall be a purpose for which that authority may borrow money.

Winding up  
of develop-  
ment corpora-  
tions.

15.—(1) Where the Minister is satisfied that the purposes for which a development corporation was established under this Act have been substantially achieved, and is further satisfied, with the concurrence of the Treasury, that the circumstances are not such as to render it expedient on financial grounds to defer the disposal of the undertaking of the corporation under this section, he shall by order provide for the winding up and dissolution of the corporation.

(2) At any time after an order has been made under the last foregoing subsection, the Minister may, with the consent of the Treasury, by order provide for the transfer of the undertaking or any part of the undertaking of the corporation to such local authority (being an authority within whose area the new town is situated) as may be specified in the order or, in so far as that undertaking consists of a statutory undertaking, to such statutory undertakers as may be so specified:

Provided that:

- (a) before making any such order the Minister shall consult with the council of the county and of the county district in which the new town is situated, with any other local authority and any statutory undertakers to whom the undertaking or part of the undertaking of the corporation will be transferred by virtue of the order, and with any statutory undertakers (not being such undertakers as aforesaid) who, immediately before the date on which the order under section one of this Act designating the site of the new town became operative, were authorized to carry on within the area designated by that order an undertaking similar to the undertaking or part of the undertaking which will be so transferred as aforesaid; and
- (b) an order under this subsection shall be of no effect until an order defining the terms on which the transfer is to be made has become operative under the subsequent provisions of this section.

(3) Where provision is made under the last foregoing subsection for the transfer of the undertaking or any part of the undertaking of the development corporation to a local authority or statutory undertakers, the terms upon which the transfer is to be made shall be such as may be determined by an order made by the Minister with the consent of the Treasury, and any such order may provide for the payment by that authority or those undertakers, in consideration of the transfer, of such sum as may be specified in the order, to be satisfied in such manner as may be so specified:

Provided that not less than twenty-eight days before making an order under this subsection, the Minister shall serve a copy of the proposed order on the local authority or statutory undertakers to whom the undertaking or any part of the undertaking of the corporation is to be transferred, and if any objection is made by them within twenty-eight days after the service of the notice, the order shall be subject to special parliamentary procedure.

(4) If the Minister is satisfied that it is expedient, having regard to the provisions of any order or orders made or proposed to be made under subsection (3) of this section, that the liability of the development corporation in respect of advances made to them under this Act should be reduced, he may, by an order made with the consent of the Treasury, reduce that liability to such extent as may be specified in the order:

Provided that an order under this subsection shall be of no effect until it is approved by Resolution of the House of Commons.

(5) An order under this section which provides for the transfer of the undertaking or any part of the undertaking of a development corporation to any local authority or statutory undertakers may contain such incidental, consequential and supplementary provisions as the Minister thinks necessary or expedient for the purposes of the order, and in particular, but without prejudice to the generality of the foregoing provision,

may extend or modify the powers and duties of that authority or those undertakers so far as appears to the Minister to be necessary or expedient in consequence of the transfer:

Provided that:

- (a) in relation to an order which provides for extending or modifying the powers and duties of any statutory undertakers, subsection (2) of this section shall have effect as if for the first reference therein to the Minister there were substituted a reference to the Minister and the appropriate Minister; and
  - (b) no order under this section shall confer or impose upon any local authority any powers or duties which are exercisable within the area of that authority by any other local authority.
- (6) An order under subsection (1) of this section may provide for the appointment and functions of a liquidator of the development corporation, and may authorize the disposal, in such manner as may be determined by or under the order, of any assets of the corporation which are not transferred to a local authority or statutory undertakers under the foregoing provisions of this section.
- (7) Any surplus arising from the winding up of a development corporation under this section shall be paid into the Exchequer; and any deficit shall be defrayed out of moneys provided by Parliament.

16.—(1) If it appears to the Minister, in the case of any area designated under this Act as the site of a new town, that there are exceptional circumstances which render it expedient that the functions of a development corporation under this Act should be performed by the development corporation established for the purposes of any other new town instead of by a separate corporation established for the purpose, he may, in lieu of establishing such a separate corporation, by order direct that the said functions shall be performed by the development corporation established for the said other new town.

Combination and transfer of functions of development corporations.

(2) If it appears to the Minister that there are exceptional circumstances which render it expedient that the functions of a development corporation established for the purposes of a new town should be transferred to the development corporation established for the purposes of any other new town, or to a new development corporation to be established for the purposes of the first-mentioned new town, he may by order provide for the dissolution of the first-mentioned corporation and for the transfer of its functions, property, rights, and liabilities to the development corporation established for the purposes of the said other new town, or, as the case may be, to a new corporation established for the purposes of the first-mentioned new town by the order.

(3) Without prejudice to the provisions of this Act with respect to the variation of orders made thereunder, an order under this section providing for the exercise of functions in relation to a new town by the development corporation established for the purposes of another new town, or for the transfer of such functions to such a corporation, may modify the name and constitution of that corporation in such manner as appears to the Minister to be expedient, and for the purposes of this Act that corporation shall be deemed to have been established for the purposes of each of those new towns.

(4) Before making an order under this section providing for the transfer of functions from or to a development corporation or for the exercise of any functions by such a corporation, the Minister shall consult with that corporation.

17.—(1) The Public Authorities Protection Act, 1893, and section twenty-one of the Limitation Act, 1939, shall not apply to any action, prosecution, or proceeding against a development corporation, or for or in respect of any act, neglect or default, done or committed by a servant or agent of any such corporation in his capacity as such.

Limitations of actions, etc.

56 & 57 Vict.  
c. 61.  
2 & 3 Geo. 6.  
c. 21.

(2) In their application to any such action as aforesaid, sections two and three of the Limitation Act, 1939 (which relate to the limitations of actions of contract and tort, and certain other actions), shall have effect with the substitution for references therein to six years of references to three years.

Superannuation of employees of development corporations.

1 Edw. 8. &  
1 Geo. 6. c. 68.

Regulations, orders, and other supplementary provisions.

Saving for revenue provisions, etc.

Restriction on the provision by development corporations of certain public services.

Transitional provisions.

18. For the avoidance of doubt it is hereby declared that development corporations established under this Act are undertakers within the meaning of section five of the Local Government Superannuation Act, 1937 (which provides for the participation in the benefits of superannuation funds maintained under that Act of employees of undertakers exercising powers under any Act or statutory order).

19.—(1) Any power of the Minister to make regulations under the Town and Country Planning Act, 1944, shall include power to make regulations prescribing anything which is required to be prescribed under that Act as applied by this Act.

(2) Any power conferred by this Act to make an order shall be construed as including a power, exercisable in the like manner and subject to the like conditions, to vary or revoke the order.

(3) The provisions of sections fifty to fifty-four of the Town and Country Planning Act, 1944 (which relate to powers of entry, local inquiries, ecclesiastical property, notification of purchases of war damaged land to the War Damage Commission, and the service of notices) shall apply for the purposes of this Act as they apply for the purposes of that Act.

20. Nothing in this Act shall be construed as exempting a development corporation from liability for any tax, duty, rate, levy, or other charge whatsoever, whether general or local.

21.—(1) Without prejudice to the provisions of subsection (4) of section two of this Act, nothing in this Act shall be construed as authorizing a development corporation to carry on any undertaking for the supply of water, electricity, or gas, or any railway, light railway, tramway, or trolley vehicle undertaking except under the authority of an enactment other than the said section two specifically authorizing them in that behalf.

(2) The development corporation established for the purposes of a new town may be authorized by means of an order made by the Minister of Transport to operate trolley vehicle services for the purposes of a new town; and any such order may impose such conditions as appear to the said Minister to be required in the interests of the public safety, and may contain such incidental and consequential provisions as appear to the said Minister to be necessary or expedient for the purposes of the order, including provisions:

- (a) authorizing the construction and maintenance in highways of any works or equipment required in connection with the services;
- (b) providing for the making and enforcement of regulations and byelaws with respect to the construction and operation of any vehicles or equipment used for the purposes of the services, and the conduct of passengers on, and of the drivers and conductors of, any such vehicles.

(3) Any order under the last foregoing subsection shall be subject to special parliamentary procedure.

(4) In this section the expression 'trolley vehicle' means a mechanically propelled vehicle adapted for use upon roads without rails and moved by power transmitted thereto from some external source.

22. If an order is made under section one of this Act in relation to an area which comprises land acquired, whether before or after the commencement of this Act, under section thirty-five of the Town and Country Planning Act, 1932, the Minister may by order provide for transferring the land to the development corporation upon such terms as may be prescribed by the order, and for the purposes of this Act any land so transferred shall be treated as land acquired under section four of this Act.



23.—(1) Any enactment contained in the Town and Country Planning Act, 1944, which is applied for the purposes of this Act by virtue of the foregoing provisions of this Act shall have effect as so applied subject to such of the modifications set out in the Fourth Schedule to this Act as are applicable thereto.

Modifications of Town and Country Planning Act, 1944, as applied.

(2) In any enactment so applied, any reference to any other enactment contained in the Town and Country Planning Act, 1944, which is applied for the purposes of this Act shall be construed as a reference to that enactment as so applied, and any reference to that Act or to Part I of that Act (not being a reference to any specified enactment or provision of that Act) shall be construed as a reference to that Act, or to Part I of that Act, as it applies for the purposes of this Act.

24. There shall be paid out of moneys provided by Parliament:

Payments out of moneys provided by Parliament of certain expenses.

- (a) any sums authorized or required to be so paid by virtue of any of the provisions of the Town and Country Planning Act, 1944, as applied by this Act, including sums payable into the road fund for the purpose of defraying expenditure out of that fund under any of those provisions;
- (b) any annual exchequer contribution payable under the Housing (Financial and Miscellaneous Provisions) Act, 1946, by virtue of any provisions of this Act;
- (c) any administrative expenses incurred by the Minister for the purposes of this Act.

25.—(1) The provisions of this section shall have effect for the purpose of the application of this Act to Scotland.

Provisions as to Scotland.

(2) For any reference to the Minister of Town and Country Planning or to the Minister of Health there shall be substituted a reference to the Secretary of State.

[Here follow various amendments to the Town and Country Planning (Scotland) Act, 1945, and to other Acts relating to Scotland.]

26.—(1) In this Act, except where the context otherwise requires, the following expressions have the meanings hereby assigned to them respectively, that is to say:

Interpretation, construction, short title, and extent.

‘appropriate Minister,’ in relation to any statutory undertakers, has the same meaning as in the Town and Country Planning Act, 1944;

‘Consolidated Fund’ means the Consolidated Fund of the United Kingdom and includes the growing produce thereof;

‘development’ includes re-development;

‘development corporation’ has the meaning assigned to it by section two of this Act;

‘enactment’ includes a local Act and an order or byelaw made under any Act;

‘financial year’ means a year beginning on the first day of April;

‘local authority’ means the council of a county, county borough, metropolitan borough, or county district, the Common Council of the City of London, and any other authority being a local authority within the meaning of the Local Loans Act, 1875, and includes a local highway authority, any drainage board, and any joint board or joint committee if all the constituent authorities are such local authorities as aforesaid;

38 & 39 Vict. c. 83.

‘local highway authority’ means a highway authority other than the Minister of Transport, and includes the London County Council;

‘local planning authority’ means a local authority for the purposes of the Town and Country Planning Act, 1932, or, in a case where, under any provision of that Act, the functions of a local authority are exercisable by a county council or by a joint committee, means that council or committee;

‘the Minister’ means the Minister of Town and Country Planning;

‘National Trust’ means the National Trust for Places of Historic Interest or Natural Beauty incorporated by the National Trust Act, 1907, and the reference to land held inalienably by the National Trust shall be construed as a reference to land which is inalienable under section twenty-one of the said Act or section eight of the National Trust Act, 1939;

7 Edw. 7. c. cxxxvi.

2 & 3 Geo. 6. c. lxxxvi.

15 & 16 Geo.  
5. c. 16.

'planning scheme' means a scheme under the Town and Country Planning Act, 1932, and includes a town-planning scheme under the Town Planning Act, 1925, or any enactment repealed by that Act;

'statutory undertakers' means persons authorized by any enactment to construct, work, or carry on any railway, light railway, tramway, road transport, water transport, canal, inland navigation, dock, harbour, pier, or lighthouse undertaking, or any undertaking for the supply of electricity, gas, hydraulic power, or water, and the expression 'statutory undertaking' shall be construed accordingly.

(2) References in this Act to any other enactment shall be construed as references to that enactment as amended by any subsequent enactment including, except where the context otherwise requires, this Act.

(3) Any reference in any enactment to any provision of the Town and Country Planning Act, 1944, which is applied by this Act, shall be construed as including a reference to that provision as so applied.

(4) This Act may be cited as the New Towns Act, 1946.

(5) This Act shall not extend to Northern Ireland.

## SCHEDULES

### Section 1.

### FIRST SCHEDULE

#### PROVISIONS AS TO ORDERS UNDER S. 1

1. Where the Minister proposes to make an order under section one of this Act, he shall prepare a draft of the order, describing the area to be designated as the site of the proposed new town by reference to a map, either with or without descriptive matter (which, in the case of any discrepancy with the map, shall prevail except in so far as may be otherwise provided by the draft order) together with such statement as the Minister considers necessary for indicating the size and general character of the proposed new town.

2. Before making the order the Minister shall publish in the London Gazette, in one or more newspapers circulating in the locality in which the proposed new town will be situated, and in such other newspapers, if any, as he considers appropriate in the circumstances, a notice:

- (a) describing the area to be designated as the site of the proposed new town;
- (b) stating that the draft of an order under section one of this Act has been prepared by the Minister in relation thereto and is about to be considered by him;
- (c) naming a place within the said area where a copy of the draft order (including any map or descriptive matter annexed thereto) and of the statement required by the foregoing paragraph, may be seen at all reasonable hours; and
- (d) specifying the time (not being less than twenty-eight days from the publication of the notice in the Gazette) within which, and the manner in which, objections to the proposed order may be made,

and shall, not later than the date on which the notice is published in the Gazette, serve a like notice on the council of the county and of the county district in which the land, or any part of the land, to which the order relates is situated, and on any other local authority who appear to him to be concerned with the order.

3. If any objection is duly made to the proposed order and is not withdrawn, the Minister shall, before making the order, cause a public local inquiry to be held with respect thereto, and shall consider the report of the person by whom the inquiry was held.

4. Subject to the provisions of the last foregoing paragraph the Minister may make the order either in terms of the draft or subject to such modifications as he thinks fit: 1ST SCH.  
—cont.  
 Provided that, except with the consent of all persons interested, the Minister shall not make the order subject to a modification including in the area designated as the site of the proposed new town any land not so designated in the draft order.

5. As soon as may be after an order has been made as aforesaid, the Minister shall publish in the London Gazette, in one or more newspapers circulating in the locality in which the proposed new town will be situated, and in such other newspapers, if any, as he considers appropriate in the circumstances, a notice stating that the order has been made and naming a place within the area designated by the order as the site of the proposed new town where a copy of the order may be seen at all reasonable hours, and shall serve a like notice:

- (a) on any local authority on whom notice of the proposed order was served under paragraph 2 of this Schedule; and
- (b) on any other person who has duly made an objection to the proposed order and, at the time of making it or thereafter, has sent to the Minister a request in writing to serve him with the notice required by this paragraph, specifying an address for service.

## SECOND SCHEDULE

### Section 2.

### CONSTITUTION OF DEVELOPMENT CORPORATIONS

#### *Appointment of members and tenure of office*

1. The members of a development corporation (in this Schedule referred to as 'the corporation') shall be appointed by the Minister after consultation with such local authorities as appear to him to be concerned with the development of the new town, and in appointing members of the corporation the Minister shall have regard to the desirability of securing the services of one or more persons resident in or having special knowledge of the locality in which the new town will be situated.

The Minister shall appoint two of the members to be respectively chairman and deputy chairman of the corporation.

2. Subject to the following provisions of this Schedule, a member of the corporation and the chairman and deputy chairman of the corporation shall hold and vacate office as such in accordance with the terms of the instrument by which they are respectively appointed.

3. If the chairman or deputy chairman of the corporation ceases to be a member of the corporation, he shall also cease to be chairman or deputy chairman, as the case may be.

4. Any member of the corporation may, by notice in writing addressed to the Minister, resign his membership, and the chairman or deputy chairman may, by the like notice, resign his office as such.

5. If the Minister is satisfied that a member of the corporation:

- (a) has become bankrupt or made an arrangement with his creditors;
- (b) is incapacitated by physical or mental illness; or
- (c) has been absent from meetings of the corporation for a period longer than three consecutive months without the permission of the corporation; or
- (d) is otherwise unable or unfit to discharge the functions of a member, or is unsuitable to continue as a member,

the Minister may remove him from his office as a member of the corporation.

6. A member of the corporation who ceases to be a member or ceases to be chairman or deputy chairman shall be eligible for reappointment.



*Remuneration*

7. The corporation shall pay to their members, in respect of their office as such, such remuneration and such reasonable allowances in respect of expenses properly incurred in the performance of their duties as may be determined by the Minister with the consent of the Treasury, and shall pay to the chairman and deputy chairman, in respect of their office as such, such additional remuneration as may be so determined.

*Meetings and proceedings*

8. The quorum of the corporation and the arrangements relating to their meetings shall, subject to any directions given by the Minister, be such as the corporation may determine.

9. The validity of any proceeding of the corporation shall not be affected by any vacancy among their members or by any defect in the appointment of any of their members.

*Instruments, etc.*

10. The fixing of the seal of the corporation shall be authenticated by the signature of the chairman or of some other member authorized either generally or specially by the corporation to act for that purpose.

11. Any contract or instrument which, if made or executed by a person not being a body corporate, would not be required to be under seal may be made or executed on behalf of the corporation by any person generally or specially authorized by them to act for that purpose.

12. Any document purporting to be a document duly executed under the seal of the corporation shall be received in evidence and shall, unless the contrary is proved, be deemed to be so executed.

## Section 3.

## THIRD SCHEDULE

[Repealed by the Town and Country Planning Act, 1947.]

## Section 23.

## FOURTH SCHEDULE

MODIFICATIONS OF PROVISIONS OF THE TOWN AND COUNTRY  
PLANNING ACT, 1944, AS APPLIED BY THIS ACT

*General Modifications*

1. For references to an order under section one of that Act, and to land as to which such an order is in force or land designated by such an order, there shall be substituted respectively references to an order under section one of this Act, and to land within the area designated by such an order as the site of a new town.

2. For references to a compulsory purchase order under that Act, or under Part I of that Act, or under any enactment contained in that Part, and to the compulsory purchase or acquisition of land thereunder, there shall be substituted respectively references to a compulsory purchase order under this Act, or under any enactment contained in or incorporated with this Act, and to the compulsory purchase or acquisition of land thereunder.

3. For references to land or buildings acquired for the purposes of Part I of that Act there shall be substituted references to land or buildings acquired for the purposes of this Act.

4. For references to the purchase or acquisition of land by a Minister, and to land acquired by a Minister, there shall be substituted respectively references to the purchase or acquisition of land by the Minister of Transport, and to land acquired by that Minister.

5. For references to a local planning authority (except the reference to paragraph (a) of subsection (2) of section twenty-three) there shall be substituted references to a development corporation.

6. References to land appropriated for the purposes of Part I of that Act and to the appropriation of land for those purposes shall be omitted.

*Additional Modifications of particular sections*

Section three. In subsection (1) for paragraphs (a) and (b) there shall be substituted the following paragraphs:

‘(a) outside the area designated under the New Towns Act, 1946, as the site of a new town for the purpose of securing the development of land in that area in accordance with proposals approved by the Minister under that Act; or

(b) for the purpose of providing proper means of access to such an area.’.

In subsection (3) for the words ‘submitted with an application for’ there shall be substituted the words ‘prepared for the purposes of’.

Section thirteen. In subsection (1) for the words ‘The preceding provisions of this Act’ there shall be substituted the words ‘The provisions of the New Towns Act, 1946’; and after the words ‘contained in’ there shall be inserted the words ‘or incorporated with’.

In paragraph (b) of subsection (4) for the words ‘the Minister having jurisdiction by virtue of the enactment in question to authorize a compulsory purchase thereunder’ there shall be substituted the words ‘the Minister of Transport’.

In subsection (5) for the words ‘subsection (1) of section two or under section four of this Act’ there shall be substituted the words ‘section four of the New Towns Act, 1946’, and in paragraph (a) of the subsection the words ‘application for the’ shall be omitted.

Section fourteen. Subsections (2), (7), (8), and (9) shall be omitted.

In subsection (5), paragraph (b) and the words ‘and in a case falling within paragraph (b) thereof in accordance with the provisions of section ten of this Act’ shall be omitted.

Section sixteen. In subsection (1), the words ‘or order’ shall be omitted; for the words ‘twenty-eight days’ there shall be substituted the words ‘six weeks’; and for the words ‘this Act’ in the fourth and all subsequent places where those words occur, there shall be substituted the words ‘the New Towns Act, 1946, or this Act’.

In subsection (4) for the words ‘this Act’ there shall be substituted the words ‘the New Towns Act, 1946, or this Act’.

Section seventeen. In subsection (2) the words ‘the authority on whose application an order under section one of this Act is made, and of’ shall be omitted.

Section eighteen. In subsections (1) and (2) for the words ‘this Part of this Act’ there shall be substituted the words ‘the New Towns Act, 1946, and this Part of this Act’.

In subsection (4) for the words ‘this Part of this Act’ in the second place where those words occur, there shall be substituted the words ‘the New Towns Act, 1946, and this Part of this Act’, and for the words ‘this Part of this Act (together, in the case of the purchase under section four or subsection (4) of section nine of this Act, with the relevant enactment mentioned in section four of this Act)’ there shall be substituted the words ‘that Act and this Part of this Act’.

4TH SCH.  
—cont.

Section twenty-two. In subsection (1) for the words 'this Part of this Act' in the second place where those words occur, there shall be substituted the words 'that Act'.

Section twenty-three. In subsection (2), in paragraph (a) the words 'except where that authority applied for the making of the order' shall be omitted.

Section twenty-four. In subsection (3) for the words 'a Minister' there shall be substituted the words 'the Minister of Transport'.

Section twenty-five. In subsections (5) and (9) for the words 'a Minister', wherever those words occur, there shall be substituted the words 'the Minister of Transport'.

Section twenty-six. In subsection (1), in paragraph (a), for the words 'any purpose in connection with which a local planning authority may be authorized under this Part of this Act to acquire land' there shall be substituted the words 'the purposes of a new town under the New Towns Act, 1946'; and in paragraph (b) the words from 'or necessitated', in the second place where those words occur, to the end of the paragraph shall be omitted.

In subsection (5), for the words 'any purpose in connection with which the authority may be authorized under this Part of this Act to acquire land' there shall be substituted the words 'the purposes of a new town under the New Towns Act, 1946'.

Section thirty. In subsection (1), after the word 'accommodation,' in the first place where that word occurs, there shall be inserted the words 'suitable to the reasonable requirements of those persons'; and at the end of the subsection there shall be added the following paragraph:

'Where the land so acquired is land within the area designated under the said Act as the site of a new town, the references in this subsection to residential accommodation shall be construed as references to such accommodation in that area.'

In subsection (3), for the words 'acquiring or appropriating authority' there shall be substituted the words 'corporation or highway authority'.

In subsection (5) for the words 'a Minister' there shall be substituted the words 'the Minister of Transport'.

Section fifty. In subsection (2) for the words 'section seven of this Act' there shall be substituted the words 'section three of the New Towns Act, 1946'.

Section fifty-one. In subsection (1) for the words 'this Act', in the first place where those words occur, there shall be substituted the words 'the New Towns Act, 1946'.

Section fifty-two. In subsection (2) for the words 'this Act' there shall be substituted the words 'the New Towns Act, 1946, or this Act'.

Section fifty-four. For the words 'this Act', in both places where those words occur, there shall be substituted the words 'the New Towns Act, 1946, or this Act'; and for the words 'the authority' wherever those words occur there shall be substituted the words 'the Minister, corporation, or authority'.

Section sixty-five. The definitions of 'clearing', and 'loan charges' shall not apply; and in the definition of 'purchasing authority' for the words 'a Minister purchasing under this Act' there shall be substituted the words 'a development corporation purchasing under section four of the New Towns Act, 1946, and the Minister of Transport purchasing under section three of this Act'.

First Schedule. In paragraph 1, in sub-paragraph (1), the words 'an application for an order under section one of this Act' shall be omitted; for the word 'thereof', in both places where that word occurs, there shall be substituted the words 'of this Act'; and for the words 'a Minister' there shall be substituted the words 'the Minister of Transport'; and in sub-paragraph (2) after the word 'sub-paragraph' there shall be inserted the words 'or by any enactment incorporated therewith'.



Second Schedule. In paragraph 2, in sub-paragraph (3) (a), after the word 'advertisement' there shall be inserted the words 'and by affixing a copy thereof, addressed to "the owners and any occupiers of the land" (describing it), to some conspicuous object or objects on the land'.

4TH SCH.  
—cont.

In paragraph 6, for the words 'land as to which an application for an order under section one of this Act is pending' there shall be substituted the words 'land in an area proposed to be designated as the site of a new town by an order a draft of which has been published in accordance with the First Schedule to the New Towns Act, 1946', and for the word 'application', in the second place where that word occurs, there shall be substituted the word 'order'.

In Part II for the words 'a Minister', in both places where those words occur, and the words 'the Minister making the order' and the words 'the Minister having jurisdiction to make the order' there shall be substituted the words 'the Minister of Transport'; and paragraph 10 shall be omitted.

Third Schedule. In Part II for the words 'a Minister', in both places where those words occur, and for the words 'the Minister having, in conjunction with the appropriate Minister, jurisdiction to make the order' and the words 'the Minister having jurisdiction as aforesaid' there shall be substituted the words 'the Minister of Transport'.

Fourth Schedule. In paragraph 1, sub-paragraph (c) shall be omitted.

In paragraph 2, in sub-paragraph (4), after the word 'right' there shall be inserted the word 'or'; and the words 'refusal of permission, grant of permission subject to conditions, or revocation or modification of permission' shall be omitted.

Fifth Schedule. For the words 'Part I of this Act', wherever those words occur, there shall be substituted the words 'the New Towns Act, 1946, and Part I of this Act'.

In paragraph 1, in sub-paragraph (1) (a) the words 'together, in the case of a purchase authorized by virtue of such an order as is mentioned in section four of this Act, with the relevant enactment mentioned in that section' shall be omitted; and in sub-paragraph (1) (d) for the words 'a Minister' there shall be substituted the words 'the Minister of Transport', and for the words 'Part I of this Act' there shall be substituted the words 'section three of this Act'.

In paragraph 9, in sub-paragraph (1) (b) for the words 'a Minister' there shall be substituted the words 'the Minister of Transport' and for the words 'four or nine thereof' there shall be substituted the words 'of this Act'.

In paragraph 10, for the words 'section eleven of this Act,' there shall be substituted the words 'subsection (4) of section six of the New Towns Act, 1946.'

Sixth Schedule. In paragraph 8, for the words 'Part I of this Act' there shall be substituted the words 'the New Towns Act, 1946, and Part I of this Act'.

In paragraph 12 for the words 'a Minister', in both places where those words occur, there shall be substituted the words 'the Minister of Transport'.

## FIFTH SCHEDULE

### MODIFICATIONS OF PROVISIONS OF THE TOWN AND COUNTRY PLANNING (SCOTLAND) ACT, 1945, AS APPLIED BY THIS ACT

[Omitted.]

## EXTRACTS FROM THE TOWN AND COUNTRY PLANNING ACT, 1947

10 & 11 GEO. 6. c 51

8. (2) Where an order is made by the Minister under section one of the New Towns Act, 1946, designating any area as the site of a new town under that Act, any development plan approved or made under this Act which relates to land in that area shall have effect as if the provisions of that order were included in the plan.

46. (1) For the removal of doubt it is hereby declared that the powers of acquiring land conferred by the New Towns Act, 1946 on a development corporation established for the purposes of a new town include power to acquire any land within the area designated under that Act as the site of the new town whether or not it is proposed to develop or redevelop that particular land.

(2) Section five of the said Act (which regulates the disposal of land by development corporations) shall have effect as if in subsection (1), after the words 'this Act' in the second place where those words occur, there were inserted the words 'or for purposes connected therewith.'

83. (1) No payment shall be made under Part VI of this Act in respect of any interest in land, being:

(b) the interest of a development corporation in land acquired by the corporation under the New Towns Act, 1946;

and where a . . . development corporation have before the appointed day disposed of an interest in any such land, no payment shall be made under the said Part VI in respect of that interest.

(2) No development charge shall be payable under Part VII of this Act in respect of the following operations or uses of land, that is to say:

(b) any operations carried out by a development corporation on land acquired by the corporation under the New Towns Act, 1946, whether before or after the appointed day, or any use by a development corporation of any such land;

and where any such land as aforesaid has been disposed of by the . . . development corporation, whether before or after the appointed day, no development charge shall be payable as aforesaid in respect of the carrying out of any operations on the land or the institution of any use of the land, for which planning permission under Part III of this Act has been granted at the time of the disposal or, in the case of land disposed of before the appointed day, in respect of the carrying out of any operations on the land or the institution of any use of the land carried out or instituted in accordance with the terms of the instrument by which the land was disposed of.

(3) In respect of any such operations or uses of land as are mentioned in the last foregoing subsection, the . . . development corporation shall from time to time pay to the Central Land Board such sums, if any, in lieu of development charges, as the Minister may, with the consent of the Treasury, determine:

Provided that the Minister may, with the like consent, direct the Board to repay from time to time the whole or any part of any sums so paid.

## EIGHTH SCHEDULE

## AMENDMENTS TO THE NEW TOWNS ACT, 1946

In section three, in subsection (2) for the words 'section ten of the Town and Country Planning Act, 1932, a special interim development order' there shall be substituted the words 'section thirteen of the Town and Country Planning Act, 1947, a special development order', and for the words 'interim development authority' there shall be substituted the words 'local planning authority'.

In section six, in subsection (3) for the words 'section forty-two of the Town and Country Planning Act, 1944' there shall be substituted the words 'section thirty of the Town and Country Planning Act, 1947'.

In the Fourth Schedule, after the modification of subsection (1) of section sixteen of the Act of 1944 there shall be inserted the words 'subsection (3) shall be omitted'; at the end of the modification of section twenty-two of the said Act there shall be added the words 'and in subsection (3) for the words from "the terms of an interim development order" to the end of the subsection there shall be substituted the words "permission granted under Part III of the Town and Country Act, 1947"' ; and in the modification of section sixty-five of the said Act for the words 'and "loan charges" shall not apply' there shall be substituted the words "'interim development application", "interim development authority", "loan charges" and "planning scheme" shall not apply, in the definition of "local planning authority" for the words "has the meaning assigned to it by section fifty-five of this Act" there shall be substituted the words "means the local planning authority within the meaning of the Town and Country Planning Act, 1947"'.





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*References to the text of the New Towns Act, 1946, and the Town and Country Planning Act, 1947, are in italics.*

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